2018 PILOTAGE ACT REVIEW

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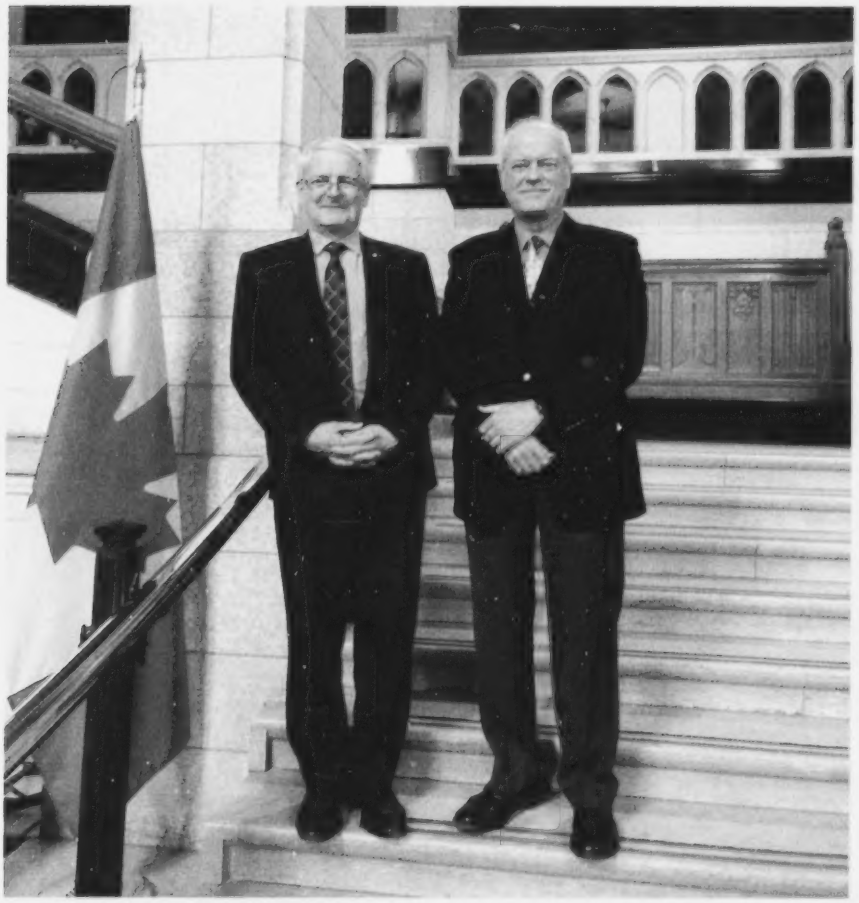

Marc Garneau, Minister of Transport and Marc Grégoire, Chairperson, *Pilotage Act* Review

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MESSAGE FROM THE CHAIR

When I was first appointed as Chairperson, I was both honoured and excited to undertake this work. I knew that this would not be an easy task, as I was charged with reviewing and making recommendations to modernize legislation that is almost a half-century old and trying to improve a system that is working fairly well. I also knew the tensions between the pilots and shipowners have always been there and would likely continue into the future.

Marine pilotage is an important profession that is somewhat hidden from public view, due to its success. Although much of our international trade arrives by sea, many people are not aware that most vessels, once they enter most Canadian waters, are required to have a marine pilot or certificate holder on board to navigate it to its destination. These marine pilots have maintained a record in the order of 99.9% incident free assignments for all of their assignments over the course of many years. While marine pilotage may be not be at the forefront of the public eye, shipping incidents can have catastrophic consequences. In this way, safe and efficient pilotage services also help to maintain clean waters and coastlines.

Over the course of the past several months, I have presided over many thoughtful, and at times lively, discussions on pilotage. Many people have given their time and advice freely to help shape and guide my thinking over the course of the Review. The overriding message from these discussions is that safety must be at the centre of the marine transportation system and there can be no compromises. Everyone has a role in supporting safe transportation including the pilots, industry, and regulators.

I had a chance to meet with Indigenous people during the *Pilotage Act* Review. Coastal communities rely on clean waterways for food, social, economic, and cultural purposes, and safety will always be the most important issue. Indigenous people are seeking a larger role with respect to the waterways that border their communities. They are interested in more of a role in pilotage decision-making bodies, and through training initiatives for young people. I encourage the Government of Canada to continue to explore how some of these needs may be met in the future under the scope of the Oceans Protection Plan or other initiatives.

The report that follows is a summary of the research and advice I have heard along with some practical recommendations to strengthen the legislative and regulatory framework for marine pilotage in Canada. In closing, I would like to thank all of the people who contributed to this Review, and the work of the *Pilotage Act* Review Secretariat headed by Michèle Bergevin. I want to give special thanks to Christy Hitchcock and Vicki Kelly who went out of their way to facilitate my work.

Respectfully submitted,

Marc Grégoire

EXECUTIVE SUMMARY

The *Pilotage Act* was enacted in 1972, following the Royal Commission on Pilotage chaired by the Honourable Justice Yves Bernier. The *Pilotage Act* provides the legislative framework for pilotage services in Canada and establishes the four Pilotage Authorities as Crown corporations: the Atlantic Pilotage Authority, the Great Lakes Pilotage Authority, the Laurentian Pilotage Authority, and the Pacific Pilotage Authority. Each of the Pilotage Authorities has a mandate to establish and operate safe and efficient pilotage services in their respective regions.

The *Pilotage Act* has been reviewed several times since its inception, either as a stand-alone subject or as part of a review of wider transportation issues. Although there have been several recommendations for reform, there was only one set of substantial amendments made in 1998. Otherwise, the majority of the *Pilotage Act* is largely unchanged. The primary purpose of the current *Pilotage Act* Review is to modernize the legislation to better align with the existing and future realities of the marine transportation system.

Background

Marine transportation is a key component of Canada's economic prosperity, with more than $200 billion of Canada's international trade carried on domestic waters. A safe, efficient, and environmentally responsible transportation system is crucial, and all stakeholders in the marine sector have a role in supporting such a transportation system.

Canada's marine pilotage system has an overall incident-free safety record of over 99.9% — a record which has not gone below 99.7% in the last decade. Overall, the safety record demonstrates that the nation's pilotage system is safe. Any proposed reforms to the *Pilotage Act* must maintain an environment for continuous improvement of safety.

While acknowledging this exemplary safety record, concerns have been raised by some stakeholders that pilotage costs in Canada are too high. Pilotage fees represent approximately 20 to 25 percent of the marine fees that vessels pay as they enter Canada. Furthermore, the monopoly structure of pilotage service delivery has drawn criticism from industry users, especially since pilotage is mandatory and shippers are responsible for the costs of pilotage through tariffs.

Throughout the *Pilotage Act* Review process, industry users expressed interest in increasing the overall cost-effectiveness of Canada's pilotage system by implementing changes to the current pilotage framework. Some considerations include amalgamating the four Pilotage Authorities into one entity, introducing more advanced technologies, and amending the existing labour model for pilots.

Additional challenges have also been identified, such as the inconsistency of pilotage regulations across the country, the absence of robust oversight and enforcement mechanisms, and the rigidity of the tariff-setting process. Some of these problems can only be addressed through legislative amendments.

In considering how to best modernize the *Pilotage Act*, all aspects of the legislation were examined to provide a comprehensive set of recommendations. The report on the *Pilotage Act* Review, as well as its recommendations, are organized into the following themes: purpose and principles, governance, labour, safety, and tariffs and fees.

Purpose and Principles

Many federal statutes contain a preamble or purpose clause, or a general statement of public-interest principles, to govern the provision of mandated services or the exercise of statutory powers created by the legislation. Apart from outlining the objects of the Pilotage Authorities in section 18 of the *Pilotage Act*, the legislation contains no direction on the public outcomes to be achieved.

The absence of a statement of objectives and policy principles links to three broad concerns about the delivery of pilotage services in Canada. The first concern is a lack of national consistency – four autonomous Pilotage Authorities have created distinctive program arrangements that respond to local preferences. The second concern is the lack of a governing policy framework for the broad discretionary powers of regulation that the *Pilotage Act* creates. The third concern is that some stakeholders have suggested that a purpose clause or a statutory declaration of principles could address current irritants or concerns, mostly related to the cost of pilotage services delivered through a monopoly. An explicit purpose clause for the *Pilotage Act* that clarifies the mandate of the Board of Directors and management team with respect to fee-setting would improve accountability and transparency and ensure that fees and tariffs fixed by the Pilotage Authorities are consistent with their purpose and objectives.

These concerns can be addressed by amending the *Pilotage Act* to enhance policy clarity, predictability and national consistency through an expanded statement of legislative purpose and governing policy principles, which are consistent with the *Canada Transportation Act's* National Transportation Policy.

Governance

The 2016 *Canada Transportation Act* Review report recommended the amalgamation of the four Pilotage Authorities into a single national entity. The purpose of exploring an amalgamated model was to determine whether there was potential to achieve cost savings and improvements in service delivery. Through the *Pilotage Act* Review process, a wider array of potential governance models were also identified and analyzed. Any changes to the current governance structure are expected to maintain or improve pilotage's current high level of safety.

The six models considered were to:

1. Retain the four Pilotage Authorities;
2. Amalgamate the Great Lakes Pilotage Authority and Laurentian Pilotage Authority, while retaining the Atlantic Pilotage Authority and the Pacific Pilotage Authority;
3. Amalgamate the Atlantic Pilotage Authority, Great Lakes Pilotage Authority and Laurentian Pilotage Authority, while retaining the Pacific Pilotage Authority;
4. Amalgamate the four Pilotage Authorities into one single Pilotage Authority;

5. Create a single, not-for-profit pilotage corporation modeled after the St. Lawrence Seaway Management Corporation; or
6. Create a single, not-for-profit pilotage corporation modeled after NavCanada.

Research on the different governance structures indicates that the predominant method for delivering pilotage services worldwide is through regulated monopolies.

In principle, the greater the degree of consolidation, the greater the likelihood of achieving efficiencies. There may also be other advantages, such as an increased national consistency for service delivery, the potential to harness more expertise to assist with risk management, and facilitating a more standardized adoption of technology. However, the extent of these gains is uncertain since they could be counterbalanced by cost increases in other categories. Furthermore, there is the potential for the loss of local responsiveness with amalgamation.

Undertaking full amalgamation or creating a not-for-profit pilotage corporation may carry greater implementation challenges than undergoing partial amalgamation. Depending on how the model is implemented, there is the potential for transitional costs that could increase the overall costs of providing pilotage services over the medium or long term. Notably, a not-for-profit model may be guided by greater cost-minimizing incentives than a Crown corporation model.

While there are benefits to amalgamating the four Pilotage Authorities, there is a lack of stakeholder support due to the potential cost increases associated with the transition and the risk that local responsiveness may decrease.

The majority of stakeholders, as indicated within their written submissions and participation within the *Pilotage Act* Review Roundtables, are in support of retaining the four Crown corporations. Most Pilotage Authorities and pilot representatives also favour the status quo, while some industry representatives have demonstrated a level of interest in alternative options, such as amalgamating the Pilotage Authorities or transitioning to a not-for-profit NavCanada model. Throughout the Review, partial amalgamation into one eastern and one western Pilotage Authority received little stakeholder support, as did the creation of a single not-for-profit corporation modeled after the St. Lawrence Seaway Management Corporation.

However, given the contiguous waterway and existing working relationship between the Great Lakes Pilotage Authority and Laurentian Pilotage Authority, the amalgamation of these two Pilotage Authorities could be undertaken with the view to reduce costs, increase efficiency, and provide a basis for assessing the feasibility and desirability of further amalgamation in the future.

Furthermore, the development of a National Advisory Committee as a national forum to discuss pilotage issues may help drive effective management, achieve national consistencies, and promote inclusiveness of a broader cross-section of expertise.

With the discussion around the governance structure comes the question of the composition of the Board of Directors. Most stakeholders voiced support for retaining the current structure of the Board of Directors – for two representatives from shipping, two from pilots, two from the public – in their preliminary written submissions, even calling to enshrine this historical

composition within the *Pilotage Act*. However, some stakeholders felt that there are real or perceived conflicts of interest on the Boards of Directors, since active members of the pilots and shipping industries hold voting seats.

Using sectorial representation is inconsistent with the Government of Canada's current practice of making appointments to Boards of Directors. Some Pilotage Authorities already have Board compositions that reflect the outcome of a selection process which differs significantly from the historical composition.

At the Roundtable on Governance in January 2018, most stakeholders signaled a shift towards supporting the idea of a neutral Board of Directors that does not have any active pilots or industry members. Some stakeholders also suggested that the majority of Directors should have some form of maritime experience, and that specialized expertise could be moved to a National Advisory Committee.

Having a neutral Board of Directors will reduce the real or perceived conflict of interest amongst Board members and will align with the Government of Canada's open and transparent processes for appointments.

Furthermore, to support the Government of Canada's commitment to reconciliation with Indigenous communities, and to provide greater opportunities for the sharing of traditional and localized expertise, **it is also recommended that one position on the Board of Directors of the Pacific Pilotage Authority be designated for a representative from the Indigenous communities of British Columbia.**

Labour

Throughout the *Pilotage Act* Review process, advantages and disadvantages have been identified with the current labour structure for delivering pilotage services. The rising cost of pilotage fees has been central to this discussion, as labour costs are a significant proportion of the Pilotage Authorities' costs. Differences between employee and contract pilots have also resulted in calls to reform the labour structure of pilotage.

For example, while the Pilotage Authorities have management and oversight capabilities over employee pilots, they are unable to exercise a similar level of influence over their contract pilots. Aside from the conditions negotiated in the service contracts with pilot corporations, the Pilotage Authorities have few levers to provide and enforce direction to contract pilots, and do not have options to engage with alternative service providers.

Furthermore, the Pilotage Authorities are only able to hire or contract with one group of pilots in each region, making them the exclusive service provider for that area. However, the inability to hire employee and contract pilots simultaneously means that the Pilotage Authorities must rely solely on pilot corporations for advice and recommendations. As a result, in areas served exclusively by contract arrangements, the Pilotage Authorities cannot develop in-house expertise on pilotage matters. This creates opportunities for conflicts of interest and leaves some Pilotage Authorities in disadvantageous positions, and points to a need for greater flexibility in the system.

These difficulties can be minimized by amending the *Pilotage Act* to allow the Pilotage Authorities to use the workforce configuration – whether employee pilots, contract pilots, or both – that best meets their needs. This would be managed through a fair and effective dispatching system so that the safety of the pilotage system is maintained.

The final offer selection arbitration model, used between the Pilotage Authorities and pilot corporations for outstanding issues in contract negotiations, has resulted in some contentious selections. Since the arbitrator must select one offer in its entirety and does not consider other relevant information pertaining to the Pilotage Authority or pilot corporation, the offer selected may not fully reflect the cost or operational implications.

The Pilotage Authority's financial self-sufficiency may be jeopardized if the selected offer is not financially viable or if a corresponding tariff increase to meet these needs is rejected. **The *Pilotage Act* should be amended such that the arbitrator must consider the purpose and principles of the legislation when making arbitration rulings.**

There are also concerns that service contracts between the Pilotage Authorities and pilot corporations may include provisions which overlap with the Pilotage Authority's *Regulations*. This circumvents the regulatory process and creates uncertainty around pilotage requirements. Therefore, it must be clear that the *Pilotage Act* and its regulations have primacy over pilotage service contracts.

As private entities, pilot corporations are not subject to financial disclosure or reporting requirements. Industry users raised concerns about the lack of transparency and accountability placed on pilot corporations. Given the delivery of pilotage services is a compulsory requirement and a federally-regulated monopoly lead to higher expectations for transparency and public scrutiny. **All pilot corporations should be made subject to greater levels of transparency and accountability, including the publication of financial statements and service contracts.**

Safety

Several issues were reviewed regarding the *Pilotage Act's* safety framework, including the scope of regulatory powers, enforcement, risk management, technology, pilotage exemptions, medical requirements, and the Arctic.

The Pilotage Authorities function as both the regulator and service provider. Internationally, these functions are often separated, with one body, generally the state, regulating the service and another body responsible for service delivery. Stakeholders indicated some support for separating these two functions; however, there were also some concerns about the capacity of Transport Canada to take over regulatory functions.

Additionally, there are significant inconsistencies related to having four regulatory frameworks for marine pilotage in Canada. While this allows for a high degree of local responsiveness, it also limits national standardization across the four pilotage regions.

To address these issues, the *Pilotage Act* should be amended to provide the Minister of Transport with the authority to make all regulations pertaining to safety. Further, the Government of Canada should provide the necessary resources to develop the pilotage safety regulatory and oversight capacity at Transport Canada.

The *Pilotage Act* currently has enforcement provisions for contraventions of the legislation, including a summary conviction offence and a fine of $5,000. These provisions are outdated and inconsistent with most other marine transportation legislation. For example, a fine of $5,000 may not be an effective deterrent for proceeding through a compulsory pilotage area without a pilot if the tariffs for that voyage exceed the total amount of the fine. Further, the *Pilotage Act* provides the Pilotage Authorities with the power to suspend or revoke pilot licenses, but limits the maximum liability for pilots at $1,000. There are no other sanctions for pilots in the legislation.

The *Pilotage Act* should be amended to include a compliance scheme and to provide the Minister of Transport with the appropriate powers to enforce, and delegate the enforcement of, these provisions. Additionally, an Administrative Monetary Penalty scheme should be developed for individuals and companies that contravene pilotage legislation and regulations.

The current risk assessment tool used by the Pilotage Authorities to determine compulsory pilotage areas is the Pilotage Risk Management Methodology. While stakeholders acknowledged that the risk assessment process is inclusive, there were concerns that they are too lengthy, complex, and costly. It was also raised that there is potential for bias in the results.

Additionally, navigation technology has advanced considerably since the *Pilotage Act* was enacted. Previous reviews of pilotage have noted the lack of adaptation of new technology in the pilotage sector. Some stakeholders have expressed support for an expanded use of technology as a way to reduce the cost of pilotage. Other stakeholders were concerned that technology could have an impact on safety.

To address these concerns, a new risk assessment process should be established through regulation which has a clear methodology, standards, guidelines, and conduct for assessment, and which considers all navigational aspects of risk, including technological advances. The *Pilotage Act* should also be amended to establish an objective that the Pilotage Authorities optimize the use of new technologies.

Across the four Pilotage Authorities, standards and requirements for obtaining pilot licences, certificates, and waivers are inconsistent. Some stakeholders feel that the exemptions systems in each Pilotage Authority works well, while others wish to see a more standardized approach.

Transport Canada should implement and administer a standardized exemption scheme and stipulate the requirements in a new national regulation. Transport Canada should facilitate and promote a national pilotage certification program for the training and evaluation of ship masters and navigational officers without compromising safety or creating competition within pilotage. Eligibility for pilotage certificates should also be extended to foreign masters and/or to a class of ship in the same company, if applicable.

Current general fitness requirements within the *General Pilotage Regulations* follow the *Marine Personnel Regulations*, which sets out medical examination requirements for seafarers. **To address regional inconsistencies across the four Pilotage Authorities regarding medical standards, Transport Canada should review the processes for determining medical fitness of pilots and develop a best practice guideline.**

Furthermore, vessel traffic in the Arctic is growing due to climate change and the advancement of technology. At present, there is no formalized Pilotage Authority in the north but ice navigators assist in providing navigation services. **Improvements under the Polar Code and formalizing the requirements to become an ice navigator will mitigate the need for Arctic pilotage in the short term. For the longer term, there is potential for pilotage in the north to be developed in conjunction with the Low Impact Shipping Corridors initiatives within the Oceans Protection Plan.**

Tariffs and Fees

The Pilotage Authorities receive no appropriations from Parliament. Revenues required to maintain pilotage operations must be generated through tariffs and, to a much lesser extent, other fees. These tariffs and fees must be enacted through regulations under the *Pilotage Act*. Furthermore, the Pilotage Authorities must ensure that tariffs are fair and reasonable and will ensure that they can remain financially self-sustaining.

Stakeholders have noted that the regulatory process for changing tariff rates is unresponsive, cumbersome, and lengthy, resulting in inefficient operating deficits or surpluses for Pilotage Authorities.

One of the main challenges faced by Pilotage Authorities is the disconnect between the federal regulatory process, which must be followed to enact tariffs, and the annual planning process that the Pilotage Authorities are required to follow under the *Financial Administration Act*. Tariffs often become effective long after annual plans have been approved by the Treasury Board, and revenue assumptions made in those plans can be invalidated by delays in the regulatory process.

Consequently, the *Pilotage Act* should be amended to grant the Pilotage Authorities complete authority to fix tariffs and other fees. Clear directions and guidelines should be established within the legislation to require proper notice and consultation with stakeholders.

With any changes to the tariff structure, consideration will need to be given to an objection process that ensures the checks and balances of the current system are maintained given the monopoly structure of pilotage.

As currently drafted, the *Pilotage Act* creates situations in which any person may file objections to tariffs at a point in time when the regulatory process has not yet been completed. Normally, adjudicative bodies consider matters after a final decision has been made by the responsible authority, not during the decision-making and approval process. The *Pilotage Act* also allows persons who are not materially affected by pilotage tariffs to raise objections to tariffs with the Canadian Transportation Agency.

The grounds for filing a tariff objection with the Canadian Transportation Agency should be limited to compliance by the Pilotage Authorities with clearly specified statutory criteria and processes, and only those subject to tariff charges, or their representatives and associations, should be able to file objections.

Further, the fee-setting ability of the Pilotage Authorities is perceived to be too narrow for services beyond marine pilotage. **The Pilotage Authorities should be authorized to fix fees for all other products and services they provide.** This will enhance the ability of the Pilotage Authorities to remain financially self-sustaining while also reducing their reliance on tariffs.

Conclusion

While it is largely agreed upon that the pilotage system in Canada works well, it is time for the legislation to be updated to reflect the realities of today and the possibilities and innovations of the future. This report is the product of a comprehensive examination of the structure and delivery of pilotage services in Canada, and charts the way forward for the modernization of the *Pilotage Act*.

After months of consultation and careful consideration, recommendations have been proposed to address deficiencies related to five key components of the legislation: its purpose and principles, governance model, labour structure, safety framework, and tariff-setting process. Implementing these recommendations, the corresponding modernization of the *Pilotage Act* will improve the overall organization and functionality of Canada's marine pilotage system.

Courtesy of Transport Canada

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CHAPTER 1

BACKGROUND ON CANADIAN MARINE PILOTAGE

The current *Pilotage Act* was enacted in 1972 following an extensive examination of pilotage issues by the Royal Commission on Pilotage, chaired by the Honourable Justice Yves Bernier (otherwise known as the Bernier Commission). As outlined in the final report, an Order in Council dated November 1, 1962 provided a broad terms of reference for the review. Specifically, the Royal Commission was required to:

> *"inquire into and report upon the problems relating to marine pilotage provided in Canada, more particularly under the Canada Shipping Act, and to recommend changes if any, that should be made to the pilotage system now prevailing, having regard to safety of navigation, development of shipping and commerce, the interest of pilots, shipowners, masters and the public generally; and in particular, without restricting the generality of the foregoing, the Commissions shall consider and report upon:*
>
> *a) the extent and nature of marine pilotage requirements, including compulsory pilotage, compulsory payment of pilotage dues and the granting of exemptions;*
>
> *b) the duties, responsibilities and status of marine pilots; and*
>
> *c) the adequacy of the organizational structure provided in the Canada Shipping Act for the administration, regulation and financing of pilotage, taking into consideration such factors as the provision of pilotage services, the determination, collection and disposal of pilotage dues, and entry into service, technical standards, conduct, income, welfare and pension arrangements of pilots."*

During the course of its work, the Commission held many public hearings, (approximately 175 days), hearing from 370 people, received 1,700 submissions and correspondence, and received 62 briefs. The Commission presented its final report on March 1, 1968.

The final report of the Bernier Commission noted that pilotage in Canada dated back to the colonial days. Not surprisingly, prior to the Bernier Commission, there had been several previous reviews of pilotage services since the first *Pilotage Act* of 1873. This included:

1. A Royal Commission in 1913 to study the Pilotage Districts of Montreal and Quebec;
2. A Royal Commission in 1918 to study conditions in the Pilotage District of Halifax;
3. Two similar inquiries in 1919, one for the Pilotage Districts of Vancouver, Victoria, Nanaimo, and New Westminster, and one for the Pilotage Districts of Miramichi, Sydney, Louisbourg, Halifax, Saint John, Montreal and Quebec;

4. A Royal Commission in 1928 to examine and report upon the Pilotage District of British Columbia; and
5. In 1949, a Special Committee was appointed through an Order in Council to consider pilotage matters in Districts where the Minister was the Pilotage Authority.

The Bernier Commission made 39 recommendations. They were diverse, ranging from recommending the creation of a separate *Pilotage Act* (as pilotage was governed under the *Canada Shipping Act* at the time), creating an exemption scheme for competent masters and mates, and imposing compulsory pilotage where and when it was required in the interest of safe navigation. Many of the recommendations have since been incorporated into the *Pilotage Act*.

***Pilotage Act*, 1972**

Prior to 1972, pilotage was governed through provisions of the *Canada Shipping Act*. The Bernier Commission had recommended establishing a separate statute as the pilotage provisions in the legislation were out of date, unnecessarily complicated, obscure, ambiguous, and in some cases, incomprehensible.

The *Pilotage Act* provides the legislative framework for pilotage services in Canada. It establishes the four Pilotage Authorities as Crown corporations: the Atlantic Pilotage Authority, the Laurentian Pilotage Authority, the Great Lakes Pilotage Authority, and the Pacific Pilotage Authority.

The *Pilotage Act* also outlines the composition of the Board of Directors, which may include a Chairperson and not more than six members. The Chairperson is appointed by the Governor in Council on the recommendation of the Minister of Transport, while the Board Members are appointed by the Minister with the approval of the Governor in Council. The *Pilotage Act* outlines that the Board Members' terms should not exceed four years, and that remuneration is fixed by the Governor in Council. Members can be reappointed. If the Chairperson is not serving in a full-time capacity, then the Board of Directors can select a Chief Executive Officer to direct and control the business. New Pilotage Authorities can be added by the Governor in Council which would subsequently be listed in the Schedule to the *Pilotage Act*.

The *Pilotage Act* provides that the Pilotage Authorities can enter into a service contract with a pilot corporation or employ their own pilots, but the choice to become either a member of a pilot corporation or an employee is made by the pilots. Dispute resolution provisions (i.e., final offer selection) related to service contract negotiations were added to the *Pilotage Act* in 1998.

The Pilotage Authorities also have the ability to make regulations, with the approval of the Governor in Council, related to a wide variety of issues covering: establishment of compulsory pilotage areas, determinations of ships subject to compulsory pilotage, licensing, waivers, certificates and notification.

Since 1998, the Pilotage Authorities are not eligible to receive Parliamentary appropriations; rather, they must be financially self-sustaining, and are obligated to set tariffs that are "fair and reasonable" for pilotage services. These are set in regulation and are subject to an objection process and a review through the Canadian Transportation Agency.

In comparison, the scope of regulatory authority for the Governor in Council is more circumscribed, and relates to the minimum qualifications for sea time, fitness requirements, forms for licenses and certificates, rules for hearings related to suspensions or cancellations of licenses and establishing compulsory pilotage areas in instances where the Pilotage Authority fails to do so. In practice, it is the Minister of Transport who recommends regulatory amendments in these areas to the Governor in Council.

Financial Administration Act

In addition to requirements in the *Pilotage Act*, the Pilotage Authorities are Crown corporations subject to Part X of the *Financial Administration Act*. This provides an oversight mechanism for Crown corporations, who report to Parliament through the appropriate Minister (for the Pilotage Authorities, this is the Minister of Transport). The *Financial Administration Act* also outlines important provisions related to the appointment, duties, and remuneration of Directors and officers, as well as decision-making, public meetings, by-laws, indemnification, and conflict of interest disclosures.

With respect to Government oversight of the Crown corporations, provisions in the *Financial Administration Act* require that the Crown corporations:

- Submit a corporate plan for Governor in Council approval, and operating and capital budgets for Treasury Board approval;
- Provide a summary of the corporate plan to the Minister, who will then table the summary in Parliament within the timeframe set out in regulations;
- Publish quarterly financial reports within 60 days of the end of each quarter;
- Prepare an annual report, including audited financial statements, which is tabled in Parliament; and
- Submit to a special examination, which is conducted by the Auditor General of Canada.

In addition to these requirements, section 89 of the *Financial Administration Act* also provides that the Governor in Council can issue a directive to the Crown corporations, and section 149 outlines that the Minister or President of the Treasury Board can request a wide variety of information from the Crown corporation. Therefore, the Pilotage Authorities are subject to a variety of mechanisms to support concepts of accountability, transparency, and providing information to Canadians.

With regard to the Pilotage Authorities' annual reports, section 150 of the *Financial Administration Act*, outlines that the Pilotage Authorities are required to submit a report on its operations to the Minister of Transport within three months after the end of its fiscal year (December 31, 2016), and the reports are tabled in both Houses of Parliament within 15 sitting days of their receipt. At the time of drafting, financial information for 2016 was the most current information available.

1.1 Canadian Pilotage Authorities

Each of the Pilotage Authorities has a mandate to establish and operate a safe and efficient pilotage service in their respective regions. Although they all share this mandate, each area has unique challenges and opportunities. Presently, there is no dedicated Pilotage Authority to govern services in the Arctic.

1.1.1 Atlantic Pilotage Authority

The Atlantic Pilotage Authority provides pilotage services in the Atlantic Region including New Brunswick, Newfoundland and Labrador, Nova Scotia, and Prince Edward Island. Within this region, the Pilotage Authority has designated 17 compulsory pilotage areas.

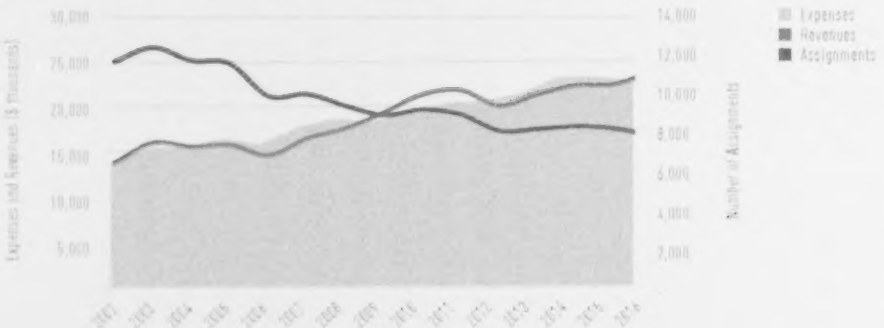
Compulsory pilotage areas in Newfoundland include: Bay of Exploits, Humber Arm, Stephenville, St. John's, Holyrood, and Placentia Bay. Nova Scotia compulsory pilotage areas include: Halifax, Pugwash, Sydney, Bras d'Or Lakes, and Strait of Canso. Compulsory pilotage areas in New Brunswick include: Saint John, Restigouche, and Miramichi. Charlottetown and the Confederation Bridge are the remaining compulsory pilotage areas in Prince Edward Island.

In 2016, the Atlantic Pilotage Authority completed 7,959 assignments which were primarily harbour pilotage.

In 2016, the Atlantic Pilotage Authority employed 47 pilots and 11 entrepreneurial[1] pilots. Entrepreneur pilots provide pilotage services in low-volume ports, such as Miramichi, New Brunswick. Ninety percent of the Atlantic Pilotage Authority's assignments are performed by employee pilots.

The key users of the Atlantic Pilotage Authority's services include the container shipping, commodities shipping, and oil and gas industries. In 2016, the oil industry accounted for approximately 39% of the Pilotage Authority's overall assignments and contributed 52% of overall revenues. Two ports, Saint John and Placentia Bay, are utilized primarily by the oil industry as they cover 62% of all oil tankers and rigs assignments. In 2016, the Atlantic Pilotage Authority generated $24.1 million in revenues, and incurred $22.9 million in expenses. Table 1 demonstrates the Atlantic Pilotage Authority's historical expenses, revenues, and assignments from 2002 to 2016.

TABLE 1: **ATLANTIC PILOTAGE AUTHORITY EXPENSES, REVENUES AND ASSIGNMENTS** (2002 TO 2016)



Source: **Transportation in Canada Addendum, Years 2002-2016**

1 An entrepreneurial pilot provides service in low volume ports through a contract with the Atlantic Pilotage Authority.

Western NL
Bay of Exploits
Humber Arm
Stephenville
Voisey's Bay
NL
PEI Region
Charlottetown
Confederation Bridge
BOUNDARY OF APA WATERS
Eastern NL
St. John's
Holyrood
Placentia Bay
QC
Restigouche
PE
NB
Miramichi
NS
Cape Breton Region
Sydney
Bras d'Or Lakes
Strait of Canso
Pugwash
Saint John
Halifax

While annual assignments have decreased since 2003, revenues have increased, which reflects that the vessel sizes and tariffs have increased during the period. Generally, there has been an overall decrease in the number of annual assignments in Nova Scotia and Newfoundland. Other areas show relatively flat assignment volumes over the 15-year period.

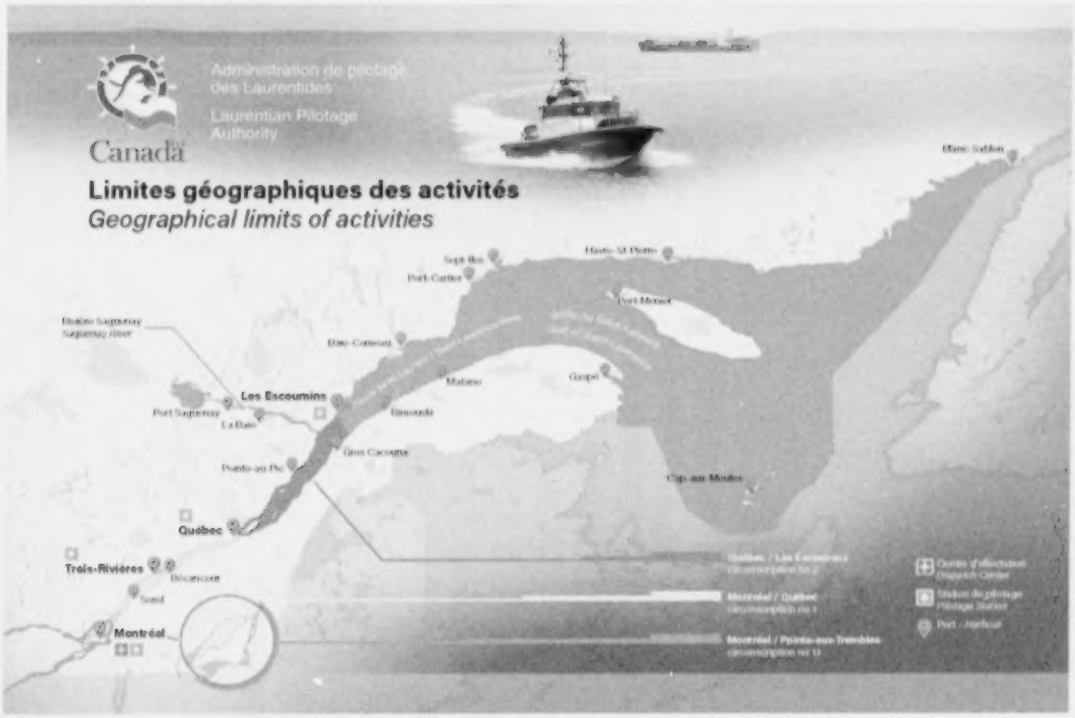
The Atlantic Pilotage Authority provides dispatching services throughout the region from the dispatch centre in Halifax. It currently has 13 pilot boat contractors that provide service ranging from provision of the boat and crewing in a port, to manning the Pilotage Authority-owned vessels, or providing reserve boats to augment service in a port. In addition, the Atlantic Pilotage Authority has 11 boats that it owns and operates.

The Atlantic Pilotage Authority reports on its reliability by publishing performance indicators related to delays on assignments. In 2016, 96.7% of all assignments commenced within one hour of the firm order time. The Atlantic Pilotage Authority reports that most of the delays were for reasons beyond its control including weather, as well as cargo, labour, and tug issues that caused vessel delay. Excluding circumstances beyond its control, the Atlantic Pilotage Authority provided service within one hour of the order time on 99.5% of assignments.

1.1.2 Laurentian Pilotage Authority

The Laurentian Pilotage Authority provides pilotage service in Canadian waters for the Laurentian Region, which includes waters in the province of Quebec, and north of the northern entrance to the St. Lambert Lock in Montreal. The Laurentian Pilotage Authority pilots generally boards vessels approaching the St. Lawrence Seaway from the Atlantic region, from their base at the entrance to the St. Lawrence River in Les Escoumins, Quebec. The Laurentian Pilotage Authority has other boarding stations in Quebec City, Trois Rivières, Sorel, and Montreal.

In 2016, the Laurentian Pilotage Authority completed 22,432 assignments, both river (distance) and harbour pilotage.

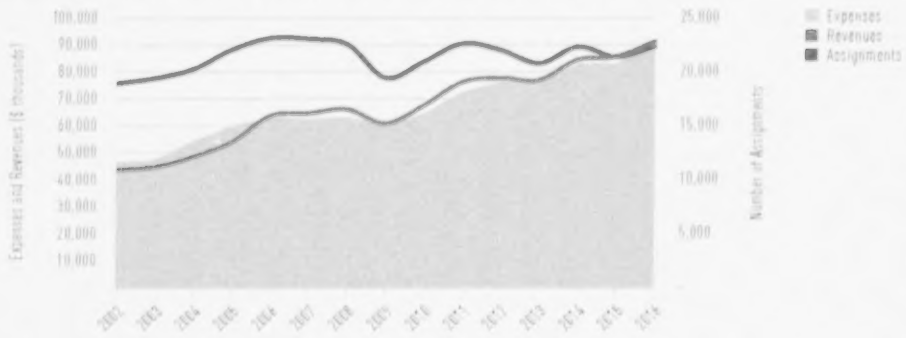


In 2016, the Laurentian Pilotage Authority was served by 169 contract pilots and 16 apprentice pilots, who are either members of the Corporation des Pilotes du St-Laurent Central or the Corporation des Pilotes du Bas Saint-Laurent. The Laurentian Pilotage Authority's operations are divided into three compulsory districts described below:

1. Port of Montreal– Referred to as District 1.1. This area is served by contract pilots from the Corporation des Pilotes du Saint-Laurent Central;
2. Mid St. Lawrence – Includes the area between Quebec City and Montreal and the St. Lawrence Seaway. Referred to as District 1, pilotage is performed by contract pilots represented by the Corporation des Pilotes du Saint-Laurent Central; and
3. Lower St. Lawrence – Includes the area between Les Escoumins and Quebec City, as well as 130 kilometers of the Saguenay River. Referred to as District 2, pilotage is performed by contract pilots represented by the Corporation des Pilotes du Bas Saint-Laurent.

The key users of the Laurentian Pilotage Authority's services are bulk commodity shipping (e.g. oil, grain, and steel shipping industries). In 2016, it generated $91.4 million in revenues and incurred $89.9 million in expenses. Table 2 demonstrates the Laurentian Pilotage Authority's historical expenses, revenues, and assignments from 2002 to 2016.

TABLE 2: **LAURENTIAN PILOTAGE AUTHORITY EXPENSES, REVENUES AND ASSIGNMENTS** (2002 TO 2016)



Source: **Transportation in Canada Addendum, Years 2002-2016**

Since 2006, revenue has consistently exceeded expenses, resulting in the generation of annual operating surpluses. Cumulative surpluses (net income) for 2006 to 2016 totaled $36.9 million.

The Laurentian Pilotage Authority provides dispatching services throughout the region from the dispatch centre located in Montreal. The Laurentian Pilotage Authority uses five boarding stations for its contract pilots. Quebec City, Trois-Rivières, Sorel, and Montreal stations are owned and administered by Groupe Océan, with whom the Laurentian Pilotage Authority has a service contract. The fifth station, in Les Escoumins, is owned and operated by the Laurentian Pilotage Authority, and has two pilot boats on site.

The Laurentian Pilotage Authority reports on its reliability by publishing performance indicators related to delays on assignments. In 2016, the Laurentian Pilotage Authority completed 99.8% of pilotage assignments with no pilot-related delays.

1.1.3 Great Lakes Pilotage Authority

The Great Lakes Pilotage Authority provides pilotage services in all Canadian waters in the provinces of Ontario, Manitoba, and in Quebec south of the northern entrance to the St. Lambert Lock.

The Great Lakes Pilotage Authority performs harbour, river, and lake pilotage. In 2016, the Great Lakes Pilotage Authority completed 7,020 assignments. The Cornwall and District No.1 on the St. Lawrence Seaway account for about half of the total assignments, with the remainder primarily in the Great Lakes districts. Churchill had only three assignments in 2016.

In 2016, the Great Lakes Pilotage Authority employed 59 pilots, including apprentices. Due to the closure of the Seaway during the winter season, the Great Lakes Pilotage Authority only has an average operating season of nine months. The Great Lakes Pilotage Authority's operations are divided into six pilotage regions which include:

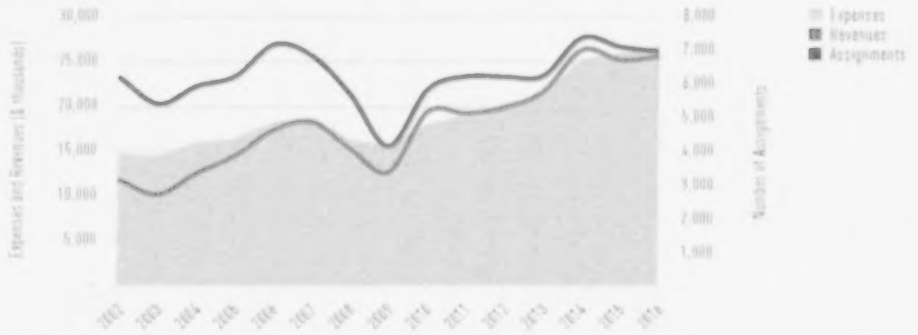
1. Cornwall District – St. Lawrence Seaway in Quebec from Montreal to Cornwall, Ontario;
2. International District No. 1 – St. Lawrence Seaway in Ontario from Cornwall to Lake Ontario;
3. Lake Ontario;

4. International District No. 2 – Includes the Welland Canal between Lake Ontario and Erie, Lake Erie, and three distinct waterways between Lake Erie and Lake Huron – the Detroit and St. Clair Rivers and St. Claire Lakes;
5. International District No. 3 – Includes Lakes Huron, Michigan and Superior; and
6. Port of Churchill – Port pilotage only at the Port of Churchill in Hudson's Bay, which is accessible for only a few months per year.

GREAT LAKES PILOTAGE AUTHORITY

The key users of the Great Lakes Pilotage Authority's services are bulk commodity shipping (e.g., oil, grain, and steel shipping industries). Pilotage services are provided for ocean-going vessels, which account for approximately 85% of all pilotage assignments. In 2016, the Great Lakes Pilotage Authority generated $25.6 million in revenue and incurred $26.7 million in expenses. Table 3 demonstrates the Great Lakes Pilotage Authority's historical expenses, revenues, and assignments from 2002 to 2016.

TABLE 3: **GREAT LAKES PILOTAGE AUTHORITY EXPENSES, REVENUES AND ASSIGNMENTS** (2002 TO 2016)



Source: **Transportation in Canada Addendum, 2002-2016**

During the global recession in 2008 and 2009, expenses exceeded revenues, leading to annual deficits of $237,000 and $1.8 million, respectively. In 2009, the deficit represented 14% of revenues. Annual assignments reached their lowest point in 2009, and increased year-over-year to 2014, with a sharp increase in 2014. Since 2014, annual assignments have been generally flat. In 2015 and 2016, expenses exceeded revenues leading to annual deficits. This was mainly due to the higher planned expenses such as training costs as a result of the approved pilot succession plans and unbudgeted spending such as pilot handling costs.

The Great Lakes Pilotage Authority provides dispatching services throughout the region from the dispatch centre in Cornwall, Ontario. The Great Lakes Pilotage Authority does not own any pilot stations or pilot boat launches. These services are provided by pilot boat contractors.

Much of the Great Lakes Pilotage Authority's pilotage is undertaken in international waters, and the Great Lakes Pilotage Authority must co-ordinate its efforts and operations with a number of other organizations such as: the St. Lawrence Seaway Management Corporation; the United States Seaway Development Corporation, which operates the lock facilities and traffic control systems within the Region; and the United States Coast Guard, which is responsible for United States pilotage matters in international waters in the Great Lakes. In many areas, pilotage assignments are shared between Canadian and American pilots.

The Great Lakes Pilotage Authority reports on its reliability by publishing performance indicators related to the total number of hours delayed. In 2016, total delays resulted in 4,415 hours, of which, 2,206 were directly attributable to a shortage of pilots. This was a decrease of 31% from 2015.

1.1.4 Pacific Pilotage Authority

The Pacific Pilotage Authority provides marine pilotage services in the coastal waters of British Columbia, including the Fraser River.

In 2016, the Pacific Pilotage Authority completed 12,661 assignments, both harbour and distance (river and coastal) pilotage. The Pacific Pilotage Authority has eight employee pilots (Fraser River) and 103 British Columbia Coast Pilots who provide coastal pilotage service through a service contract.

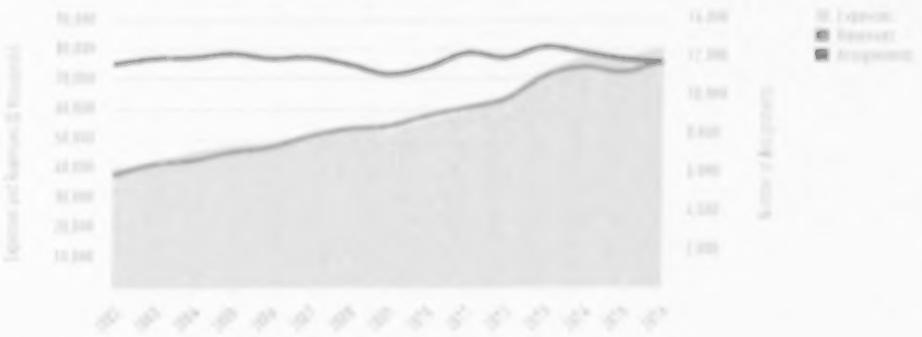
The Pacific Pilotage Authority's operations are divided into five key traffic areas, with pilotage services provided by contract pilots in all areas except the Fraser River.

1. Fraser River –These assignments were performed by eight employee pilots and accounted for 8% of the total assignments for the Pacific Pilotage Authority in 2016.
2. Vancouver Fraser Port Authority – Includes the Vancouver Harbour, Roberts Bank, and Deltaport. This area accounted for 66% of the total assignments for the Pacific Pilotage Authority in 2016.
3. Vancouver Island – Accounted for 13% of the total assignments for the Pacific Pilotage Authority in 2016. The Pacific Pilotage Authority owns a launch in Brotchie, and there is a contracted launch in Nanaimo. The forest products and cruise ship industries are primary users of the service.
4. Northern – Pilotage Services focused on the Port of Prince Rupert (several marine terminals) and the Municipalities of Kitimat and Stewart. The Northern area accounted for 10% of the Pacific Pilotage Authority's assignments in 2016. Coastal pilotage assignments in Northern British Columbia can extend over a few days, requiring the use of multiple pilots.
5. Other (Coastal) – Coastal pilotage services not focused in Vancouver Fraser Port Authority, Fraser River or Vancouver Island areas, accounted for 3% of the Pacific Pilotage Authority's assignments in 2016.

Pacific Pilotage Region
• Compulsory Areas
Area 1 All the waters of the Fraser River and tributaries
Area 2 Canadian waters of the Juan de Fuca Strait east of Victoria, all the waters of the Strait of Georgia including Vancouver Harbour, all the waters of Queen Charlotte Strait to the north end of Vancouver Island
Area 3 Canadian waters of the Juan de Fuca Strait west of Victoria and the western coastal waters of Vancouver Island
Area 4 The coastal waters of the British Columbia mainland from the northern end of Vancouver Island to the boundary with Alaska
Area 5 All the coastal waters of the Queen Charlotte Islands
ALASKA
Alaska / British Columbia Boundary
British Columbia
Alberta
Area 4
Area 5
Queen Charlotte Islands
Queen Charlotte Strait
Area 2
Vancouver Island
Strait of Georgia
Area 1
Fraser River
Area 3
Victoria
Juan de Fuca Strait
USA

The key users of the Pacific Pilotage Authority's services include container shipping, shipping of forest products, and grains, and cruise ships. In 2016, the Pacific Pilotage Authority generated $76.5 million in revenue and incurred $80.3 million in expenses. Table 4 demonstrates the Pacific Pilotage Authority's historical expenses, revenues, and assignments from 2002 to 2016.

TABLE 4: **PACIFIC PILOTAGE AUTHORITY EXPENSES, REVENUES AND ASSIGNMENTS** (2002 TO 2016)



Source: Transportation in Canada Addendum, Various Years

Revenues have generally tracked expenses very closely over the above years, and both have grown by about 90 to 100 percent over the 15-year period. Since 2014, expenses have exceeded revenues. In 2016, there was a deficit of $3.8 million, which reflects the planned depletion of reserves as agreed by the Board of Directors.

The Pacific Pilotage Authority owns five pilot boats and operates pilot launches at three permanent boarding stations in Victoria, Prince Rupert, and Steveston. In addition, it engages contract launches at Pine Island (northern tip of Vancouver Island) and off Snake Island in the Nanaimo area.

The Pacific Pilotage Authority reports on its service reliability by publishing the number of delays caused by circumstances within its control, specifically, delays caused by the pilot, or dispatch of the pilot launch. In 2016, the Pacific Pilotage Authority reported no delays caused by either of these reasons. The Pacific Pilotage Authority only introduced this performance indicator in 2008. Since that time, the number of delays have been less than 10 each year.

1.2 Previous Reviews of the *Pilotage Act* and Pilotage Issues

Since its inception, the *Pilotage Act* has been reviewed at several points, either as a stand-alone subject or as part of a review of another issue (e.g., *Canada Marine Act* Review, 2003). In addition, case law, risk assessments, special examinations conducted by the Office of the Auditor General, and Canadian Transportation Agency decisions have all served to shape and influence the development of the marine pilotage system in Canada.

Recent reviews (since Bernier) have included:

Review of the *Pilotage Act* by the Canadian Transportation Agency (1999)

A series of legislative amendments were made in 1998 when the former Bill C-9 created the *Canada Marine Act*. Amendments to the *Pilotage Act* were undertaken at that time in order to address the rising costs of pilotage services. These amendments included:

- Adding the requirement that the Pilotage Authorities be financially self-sufficient and not receive appropriations from Parliament;
- Adding the final offer selection provisions;

- Changes to the tariff objection process; and
- A limited number of administrative amendments such as allowing reappointment of Directors.

Pursuant to the requirement in the former Bill C-9 (*Canada Marine Act*), the *Pilotage Act* was reviewed by the Canadian Transportation Agency in 1999. This review was focused on pilot certification, training and licensing, compulsory pilotage area designations, dispute resolution, financial self-sufficiency, and cost-reduction. Although some of the stakeholders commented on the need for a broad examination of pilotage services (e.g., review the structure of providing pilotage services through four Crown corporations), the panel tasked with conducting the review made a decision to keep the review focused on the amendments undertaken by the former Bill C-9 (*Canada Marine Act*). The review made 21 recommendations, which included recommendations related to risk assessments, waivers, double pilotage, docking pilot services, training and licensing, pools of pilot candidates, pilot assessments, dispatching, certification, reporting on measures to reduce costs, maintaining the historical composition of the Board of Directors, consultations, incident reporting, complaints, and implementation strategies. Most of these recommendations had been implemented by the time that the *Canada Marine Act* Review was undertaken in 2002.

Review of the *Canada Marine Act* (2003)

The *Canada Marine Act* was reviewed in 2002 pursuant to requirements in the former Bill C-9 that created the *Canada Marine Act*. The Minister of Transport appointed a four-member panel to undertake the review. This review made two recommendations regarding pilotage:

- Allow an arbitrator to request additional pertinent information from the parties; and
- Formalize the current process for selecting the Boards of Directors that includes two members from the shipping industry, two from the pilots, and two members from the public, and add a knowledge and experience clause, similar to what is reflected in the *Canada Marine Act* for Port Authorities.

The review also made some observations related to pilotage and the incomplete implementation of the 1999 recommendations. In particular, the report noted that the domestic shipowners had raised concerns about expanding certification for qualified masters in both the Laurentian Pilotage Authority and Great Lakes Pilotage Authority's regions.

Stakeholders also raised that there was a need for another pilotage review at that time. Key issues included the scope of the application of the Pilotage Risk Management Methodology, the process for assessing masters', pilots' and officers' competency, and enhancements to the Great Lakes Pilotage Authority's requirements to exempt vessels from compulsory pilotage. The panel was also concerned by stakeholders' differing perspectives on certification in both the Laurentian Pilotage Authority and Great Lakes Pilotage Authority's regions, and about tense relationships between the pilots in the Laurentian Pilotage Authority region and domestic shipowners, noting that the tension could be detrimental to fostering improvements and modernization of the St. Lawrence River, Seaway, and Great Lakes region.

Consultations and Review of portions of the *Pilotage Act* preceding Bill C-64

The Government initiated consultations in January 2007 prior to tabling Bill C-64 (*An Act to amend the Pilotage Act*) on June 19, 2007. The consultation process was as a result of a particular situation in the Laurentian Pilotage Authority. An arbitrator had awarded a significant wage increase to one of the pilot corporations, and a subsequent tariff increase was rejected by the Canadian Transportation Agency, which placed the Pilotage Authority in a situation where it was unable to meet its mandate to remain financially self-sufficient. The Government intervened to issue a directive that allowed the tariff increase.

There were four discussion questions that stakeholders were asked to consider. These were related to:

- Possible amendments to the final offer selection process that would require an arbitrator to take the Pilotage Authority's corporate plan and other financial factors into consideration and increase flexibility;
- Possible amendments to the review process for tariff objections, including potential transfer of responsibility from the Canadian Transportation Agency to Transport Canada;
- Allowing the Pilotage Authorities to employ both employees and pilot corporations; and
- Removing the obligation of the Minister of Transport to investigate objections to certain regulatory proposals, such as the designation of compulsory pilotage areas.

Stakeholders were divided on the questions, with stakeholders in the Pacific expressing no support for any of the potential amendments. There was some support for changes to the final offer selection process and alternative employment models in Central/Eastern Canada, and other stakeholders advocated for stronger measures or other changes.

The Bill, which did not progress beyond the first hour of debate at second reading proposed amendments to:

- Give Pilotage Authorities flexibility in the manner of engaging the services of pilots and allow the Pilotage Authority to hire both employee and contract pilots;
- Provide the Minister with the authority to choose a commercial arbitrator to resolve disputes between Pilotage Authorities and corporations providing pilotage services;
- Provide flexibility to the Minister to conduct an investigation when a notice of objection is received regarding operational amendments to regulations, such as designating compulsory pilotage areas;
- Add the requirement to be financially self-sustaining to the Pilotage Authorities objectives; and
- Make a Pilotage Authority's corporate plan and its objects considerations in the final offer selection process and in Canadian Transportation Agency decisions on pilotage tariffs.

***Canada Transportation Act* Review (2016)**

The 2016 *Canada Transportation Act* Review noted that while Canada's pilotage system was internationally respected, there were concerns about costs and that it is slow to take into account new risk profiles and changes in technology. With advancements in both

communications and information technology, these undercut the rationale for maintaining four separate organizations. The review panel made three specific recommendations related to pilotage, including: amalgamating the Pilotage Authorities, reviewing governance for marine navigation, and reviewing compulsory pilotage areas every three to five years.

Courtesy of the Great Lakes Pilotage Authority pilots

CHAPTER 2

RATIONALE FOR THE REVIEW AND PROCESS

In November 2016, the Government of Canada announced the Oceans Protection Plan, which is designed to improve marine safety, promote responsible shipping, protect the environment, strengthen partnerships with Indigenous communities, and invest in science for evidence-based decision making.

This is a $1.5 billion investment in a multitude of initiatives related to protecting Canada's coasts and waterways. As part of the Plan, the Government committed to reviewing the *Pilotage Act* to modernize the legislation and support the delivery of safe and efficient pilotage services into the future.

2.1 Pilotage and Safety

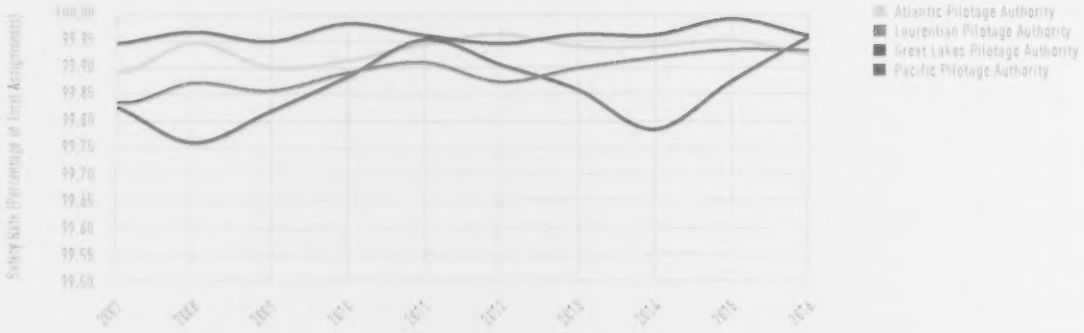
Marine transportation is a key component of Canada's economic prosperity with more than $200 billion of Canada's international trade carried on Canadian waters. A safe, efficient, and environmentally responsible transportation system is crucial. All players in the shipping sector have a role in supporting a safe transportation system.

A major shipping incident can have far-reaching ramifications including injuries, environmental contamination, loss or contamination of wildlife and waterfowl, damage to infrastructure, and damage or loss of the vessel. Remediation costs can be substantial. Marine pilotage services are a critical component of Canada's marine safety framework and provide an important mitigation strategy for risks associated with shipping. Without counting the number of assignments done by certificate holders, there are more than 50,000 pilotage assignments completed annually among the Pacific and Atlantic Oceans, and in the Great Lakes/St. Lawrence River system.

There are approximately 27 Acts that apply to marine transportation. Some of these, like the *Canada Shipping Act* (2001) and the *Pilotage Act* are completely within the purview of the Minister of Transport, while others may fall under the purview of another Minister, such as the Minister of Employment, Workforce Development and Labour, or the Minister of Environment and Climate Change. These Acts work together to assist in supporting a safe transportation system, environmental protection, and economic goals.

As depicted in Table 5, marine pilotage in Canada currently has an overall incident-free safety record of over 99.9%; a record which has never dipped below 99.7% in the last decade.

TABLE 5: **SAFETY RATE AMONG PILOTAGE AUTHORITIES** (2007 TO 2016)



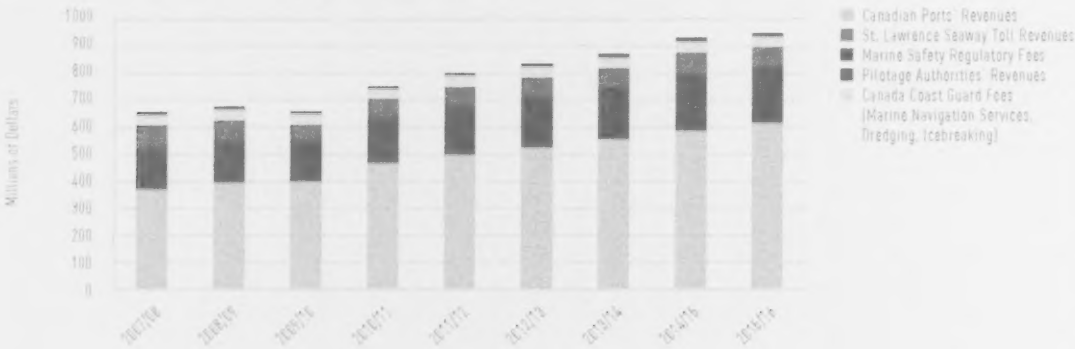
Source: **Pilotage Authorities' Annual Reports, Years 2007 - 2016**

These safety records demonstrate that, overall, Canada's pilotage system is safe. Throughout the course of the *Pilotage Act* Review, all stakeholders have emphasized the need to ensure that any proposed reforms do not adversely impact the current safety records.

2.2 Economic Considerations

In 2016, the revenues from Pilotage Authorities (earned almost exclusively through pilotage fees) totalled $217.9 million. This represents almost 25% of the marine fees (excluding tug costs) paid in Canada since 2007 (See Table 6).

TABLE 6: **MARINE FEES PAID BY VESSELS IN CANADA** (2007/08 TO 2015/16)



Sources:
Marine Safety Regulatory Fees: **Annual Departmental Performance Reports, Transport Canada**
Canada Coast Guard Fees: **Annual Departmental Performance Reports, Fisheries and Oceans Canada**
St. Lawrence Seaway Toll Revenues, Pilotage Authorities' Revenues and Canadian Port Revenues: **Annual Transportation in Canada Reports – Statistical Addendum.**

Pilotage fees consistently represent approximately 20-25% of the marine fees that vessels pay as they enter Canada. One of the drivers behind the *Pilotage Act* Review is the commonly-voiced industry perspective that pilotage costs in Canada are too expensive. It is indeed at the heart of the tensions between the shipowners and pilots. However, the notion of "too expensive" cannot exist in a vacuum; it must induce the question: expensive *relative to what?*

In 1968, the Bernier Commission calculated that pilotage tariffs were 0.1% of the total value of waterborne trade. Applying the same methodology to data between 2007 and 2015, Table 7 depicts that pilotage fees relative to the value of goods being shipped have ranged between 0.08% and 0.11%, and thus, their proportion has remained quite static over time.

TABLE 7: **PILOTAGE COSTS RELATIVE TO THE VALUE OF WATERBORNE TRADE** (2007 TO 2016)

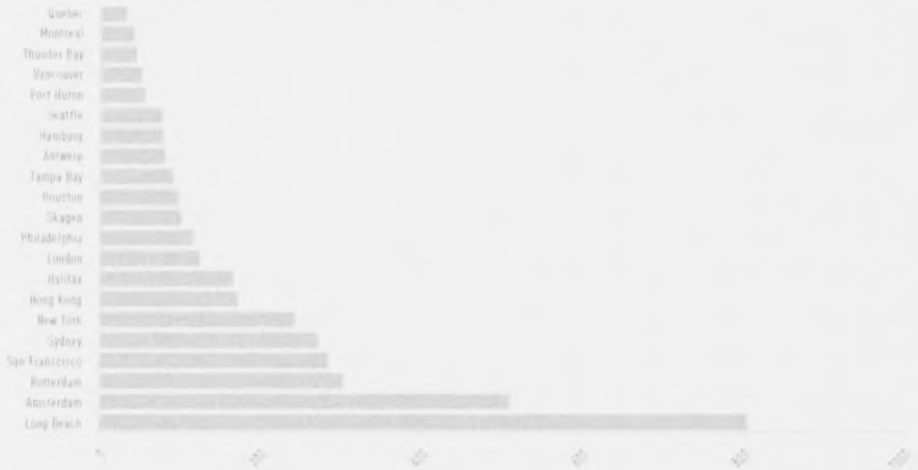
	Pilotage Costs ($ million)	Value of Trade ($ million)	Pilotage Cost as % of Value of Trade
2007	$155.14	$165,052	0.094%
2008	$157.08	$195,665	0.080%
2009	$152.23	$152,087	0.100%
2010	$170.13	$170,103	0.100%
2011	$180.80	$205,408	0.088%
2012	$184.23	$204,614	0.090%
2013	$193.82	$201,187	0.096%
2014	$208.99	$210,450	0.099%
2015	$207.47	$205,321	0.101%
2016	$217.96	$199,104	0.109%

Source: **Based on Tables EC6, EC7 and M7 from Transportation in Canada 2016 – Statistical Addendum, Transport Canada, 2017.**

While this type of comparison provides some insight in regards to the relative cost of pilotage, it is not without its challenges. Maritime trade statistics are collected from customs forms, which are not designed to capture transportation data. Issues include no standard unit of measurement (e.g., bulk commodities typically recorded in tonnes, lumber typically reported in cubic metres), and data are recorded based on the port of customs clearance and not the port of entry/exit.

Alternatively, attempts have been made to compare the pilotage costs at Canadian ports to other jurisdictions. In its submission, the Canadian Marine Pilots' Association provided the following graph comparing various jurisdictions:

TABLE 8: **JURISDICTIONAL SCAN OF PILOTAGE COSTS**
22,746 GRT BULKER – COST PER NAUTICAL MILE ($CND)

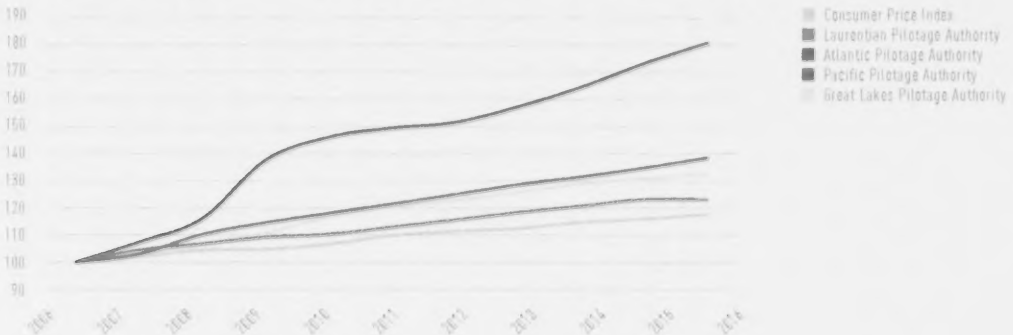


Source: **Canadian Marine Pilots' Association submission to the *Pilotage Act* Review, October 31, 2017.**

This type of analysis has it caveats as well. For example, it does not account for different navigational challenges at each port, or the duration of each pilotage assignment.

A third comparison that is often used for pilotage tariffs is the Consumer Price Index. A number of stakeholders have raised concerns regarding the pace of tariff increases, noting that these increases have far outpaced Canada's Consumer Price Index, as seen in Table 9.

TABLE 9: **CONSUMER PRICE INDEX COMPARED TO PILOTAGE TARIFFS** (2006 TO 2016; 2006 = 100)



Source: **CPI - Statistics Canada, Tariff Increase – specific request to each Pilotage Authority**

While illustrative, this analysis also presents challenges. Tariffs are the only mechanism to cover the expenses of the Pilotage Authorities. Tariffs must cover the normal operating expenses that are subject to the same inflation pressures as the Consumer Price Index but must also cover all additional expenses such as infrastructure investments, training needs, and other capital investments. Some stakeholders have cautioned against this type of analysis. In its submission, the Canadian Marine Pilots' Association states:

"This line of reasoning does not reflect the fact that pilotage charges are directly influenced by vessel size and that tremendous increases in vessel size have led to exponential gains for industry. For example... the average size of vessels grew by 45% between Québec City and Montreal over the last 10 years. During the same period, according to Statistics Canada, the CPI increased by 15%. The apparent increase in the cost of pilotage above the CPI actually masks a significant cost-saving and productivity gain that has accrued to shipowners as a result of lower pilotage costs when measured by size of vessel."

Canadian Marine Pilots' Association submission, p. 5

Stakeholders have also asserted that the structure of pilotage in Canada is a fundamental cause of its perceived high costs. For example, the Shipping Federation of Canada highlighted:

"...the current structure has led to a pilotage system that is unable to control costs... We are in this situation because the Pilotage Act does not provide adequate checks and balances to counteract the effects of the monopoly structure under which the pilotage system operates."

Shipping Federation of Canada submission, p. 3

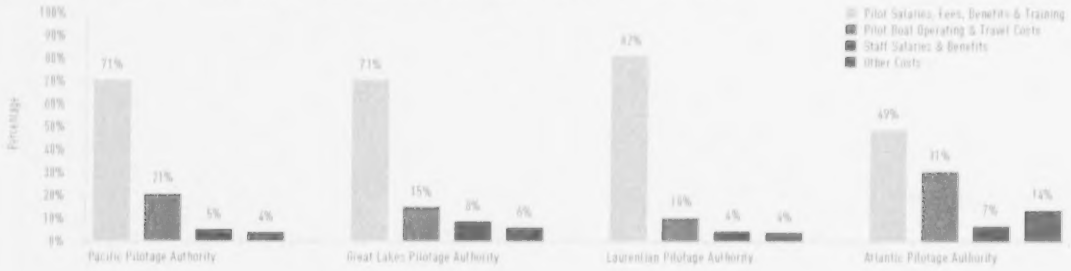
Pilotage in Canada is indeed a monopoly. The *Pilotage Act* grants the Pilotage Authorities exclusive service provision rights within their geographic area of operation. This means that in addition to pilotage being mandatory, shippers are only able to engage Pilotage Authorities for this service.

Monopolies, when left unchecked or unregulated, will typically result in prices being set at a level above the cost of providing the service. Cognizant of this, the *Pilotage Act* requires that the price for pilotage services be set at a level that is "fair and reasonable," and Pilotage Authorities are mandated to set tariffs at a price that just cover costs. In other words, Pilotage Authorities set their prices to break even and are not expected to profit from providing pilotage services.

However, there are other elements of the *Pilotage Act* that put upward pressure on costs. Provisions in the *Pilotage Act* stipulate that the Pilotage Authorities may employ pilots directly or, in the case where pilots formed a body corporate, the Pilotage Authority may solely contract with the body corporate for the services of marine pilots. This means that Pilotage Authorities are only able to engage with one body of pilots.

This results in another monopoly structure where, due to the lack of competition in hiring pilots, pilots are able to set their prices at a level above the cost of providing their service. This is an important element, considering that fees paid to pilots represent the largest of the Pilotage Authorities' expenses. Table 10 demonstrates that pilot salaries, fees, benefits, and training account for 49 to 82 percent of total expenses. If pilot boat expenses are excluded, this increases to 72 to 91 percent.

TABLE 10: **2016 CORE EXPENSES AS % OF TOTAL EXPENSES** (ALL PILOTAGE AUTHORITIES)



*Percentages presented may not add up precisely to 100% due to rounding.

Source: ***Pilotage Governance Models Assessment*, KPMG, February 2018.**

The structure of the pilotage system thus far has shown how its various elements create a snowball effect that impacts the tariffs:

- Pilots are able to set their fees at a level higher than the cost of delivering the service;
- Pilotage Authorities set their tariffs in consideration of all costs, including the fees set by pilots; and
- Because pilotage is mandatory, shippers must pay the tariffs set by the Pilotage Authorities.

There is one further element that impacts cost that should be highlighted. As noted earlier, Pilotage Authorities are required to set their prices to break even and are not expected to profit from providing pilotage services. Profit-maximizing behaviour would typically see firms seeking to reduce their costs relative to the price they charge, such that profits will be at their largest. However, given that Pilotage Authorities are expected to be profit-neutral and have no incentive to exhibit profit-maximizing behaviour with respect to costs, and it can be argued that there is limited incentive within this structure to keep costs low.

This is a key area of concern for some stakeholders. Shippers especially would like the principles of cost-effectiveness, productivity, and innovation introduced into Canada's pilotage system and Pilotage Authorities to combat the lack of incentives to keep costs low.

Over the course of the *Pilotage Act* Review, stakeholders provided examples of their experiences in engaging with Canada's pilotage system to highlight some of its challenges with respect to costs. In its submission, the Chamber of Marine Commerce identified that pilotage costs related to transiting compulsory pilotage zones in the St. Lawrence River were equal to—and in certain cases, 1.5 times greater than—the cost of the entire ship's crew. Another stark example of pilotage costs was provided by the Marine Recycling Corporation & Raw Materials Company Inc.:

> *"...it has become increasingly difficult dealing with the Pilotage Authorities. Likely the most difficult situation for our company, is trying to estimate towing costs, due primarily to the inconsistency in the number of pilots, which the Pilotage requires for any given tow. We have done tows with same size vessels (ie: 730 foot lakers), in the same waters (eg: Toronto Harbour to Port Colborne, through the Welland Canal), whereby the GLPA [Great Lakes Pilotage Authority] has required, one (1), two (2) or as many as three (3) pilots.*

Recently, MRC towed the 300 foot long car ferry, Le Marc (Camille Marcoux), from Quebec City to Port Colborne. From QBC 29 to TRV 19 six (6) pilots were assigned, from TV 19 to MB 100 six (6) pilots were assigned and from MB 100 to SLBSTN five (5) pilots were assigned. In addition the tow was stopped for darkness. In our 60 year history and more than 100 dead ship tows, this tow set a record for the number of pilots assigned and a first for stopping a tow for darkness."

Marine Recycling Corporation & Raw Materials Company Inc. submission, p.2

Clearly, concerns regarding cost and efficiency were a central element throughout the Review, and many stakeholders emphasized the need to seek new ways to reduce these costs.

2.3 Purpose of the Review

The purpose of the *Pilotage Act* Review is to modernize the legislation. The legislation is over 45 years old and the majority of the legislation has not been amended, though there have been several recommendations for reform and one substantial set of amendments in 1998. Several stakeholders have questioned the need for the Review, noting that the legislation and regulatory framework have functioned reasonably well and have fostered an exemplary safety record.

For some, the need to review the legislation simply because it has not been frequently amended is not a persuasive reason for the Review:

"The Guild disagrees... with the Discussion Document's subsequent assertion that conclusions of the reviews - that virtually no amendments to the Act were required - now somehow justifies "action...to modernize the legislative framework." Surely, the opposite is actually the case. Because the findings of the many reviews undertaken to date have generally confirmed the system's enduring effectiveness in delivering safe and practical pilotage, there is no pressing need for a wholesale rethinking of Canada's pilotage system."

Canadian Merchant Service Guild submission, p. 1

Despite this view, it is clear that there are problems with the current system. For example, the tariff process is too rigid and inflexible, which impairs the Pilotage Authorities' ability to be financially self-sufficient. Technological advancements outpace amendments to the legislation or regulations designed to govern these tools. Stakeholders have repeatedly raised concerns that provisions in service contracts "trump" the regulations. Each Pilotage Authority has developed regulations to meet local needs that have had the positive impact of developing a system that responds to local conditions, and the unanticipated impact of introducing a lack of consistency across the marine pilotage system as a whole. Finally, there is the perception that costs are unchecked and that amalgamation, more technology, and different labour models could generate cost savings. Some of these problems can only be addressed through legislative changes, which was *why* the Review was undertaken. In considering how best to modernize the *Pilotage Act*, it was important to examine all aspects of the legislation in order to provide a comprehensive set of recommendations for reform.

2.4 Process for the Review

In terms of *how* the Review was conducted, a preliminary scan of available research, case law, special examinations conducted by the Office of the Auditor General, Canadian Transportation Agency decisions, past reviews, and academic articles were analyzed to identify research gaps and areas for further study. A total of nine contracts covering 13 issues were launched and there were over 50 bilateral meetings with stakeholders from August to December 2017. A series of seven Roundtables were held in St. John's, Ottawa, Montreal, Halifax, Vancouver, Toronto, and Prince Rupert (with representatives from Indigenous communities) from November to December 2017. An eighth Roundtable on the subject of Governance was held in Ottawa in January 2018. An online survey was developed to seek feedback from both stakeholders and the broader public, and a public mailbox was set up to receive formal submissions from stakeholders. There are 28 submissions posted on the *Pilotage Act* Review website.

A final set of Roundtables was held in March 2018, in Vancouver, Montreal, Halifax, and Toronto. The purpose of these sessions was to provide stakeholders with the opportunity to provide final advice to help shape the recommendations which follow.

CHAPTER 3

PURPOSE AND PRINCIPLES

3.1 Policy Objectives

The *Pilotage Act* is enabling legislation. Its primary function is to authorize the creation of Pilotage Authorities and to enable them: i) to deliver pilotage services, directly or through contractual arrangements; ii) to establish pilotage requirements through regulations; iii) to fix tariffs for pilotage services; iv) to issue pilotage licences and certificates; and v) to suspend and cancel those documents for cause.

Many federal statutes contain a Preamble or Purpose clause or some general statement of public-interest principles, to govern the provision of mandated services or the exercise of the statutory powers created by the legislation. Apart from a terse statement of the objects of Pilotage Authorities in section 18 of the *Act*, the *Pilotage Act* contains none of these. There is no general statement of Parliament's objectives in enacting this legislation and no statement of the public purpose that compulsory pilotage is meant to serve. While the legislation vests significant powers in the Pilotage Authorities – to require the use of pilots, to set tariffs, to issue, or deny licences and certificates – there is no direction on the public outcomes to be achieved.

> *"Although sections 18 and 19 of the Pilotage Act mention the concept of "efficient (and economical) pilotage services," we believe there is a need to strengthen this mandate and introduce a* ***greater commitment to actually delivering in this respect."***
>
> ***Shipping Federation of Canada submission, p. 7; emphasis added***

Where policy direction is provided, it is attached to specific provisions or authorities. Section 18 of the *Pilotage Act* states that the objects of a Pilotage Authority are "to establish, operate, maintain and administer in the interests of safety an efficient pilotage service" within its assigned region. According to subsection 33(3), pilotage tariffs shall be "fair and reasonable." Users of pilotage services can contest a tariff where they believe it to be "prejudicial to the public interest." The *Pilotage Act* offers no further guidance on what constitutes efficiency, fairness, reasonableness or the public interest. Nor is there any guidance on *how* the Pilotage Authorities should make decisions and deliver services – for example, the use of a risk-management approach to safety concerns, or the need to encourage the adoption of new technology, to increase efficiency, and lower costs.

"Modern legislation often includes a set of objectives which establish policy goals and a focus on the outcomes to be achieved. These are essential to establish the guiding principles for governance, regulation and service delivery against which decisions, outcomes and performance can be measured. The stated objectives of the Pilotage Act should be consistent with those found in other marine legislation in Canada."

Chamber of Marine Commerce submission, p. 14

The absence of a statement of policy objectives or policy principles links to three broad concerns about the pilotage program that surfaced in the public consultation.

The first concern is national consistency. Four autonomous Pilotage Authorities have created distinctive program arrangements that reflect local conditions and respond to local preferences.

This differentiation between regions seems to have grown over time. Some users – particularly those that operate across multiple regions – have commented that the regionalization of services and practices needs to be counter-balanced by national standards and approaches. Stakeholders identified a number of potential actions for increasing national consistency and predictability. A statutory declaration of objectives or principles – for the whole of the pilotage program or specific to Pilotage Authorities – is one such tool. Others could include: reassigning regulation-making to Transport Canada, appointing a national advisory board, and consolidating Pilotage Authorities.

The second concern is the lack of a governing policy framework for the broad discretionary powers of regulation that the *Pilotage Act* creates.

The *Pilotage Act* creates legal monopolies for the provision of pilotage services and vests the Pilotage Authorities with largely unfettered discretionary powers over pilotage requirements, licensing standards and certification within their region. Granted, these powers are subject to legislated checks and balances. The public can request a Ministerial review of certain regulations made by the Pilotage Authority (subsection 21(1)). As Crown corporations, the Pilotage Authorities are also subject to a more general oversight and control by central agencies and Ministers, whom may issue a "letter of expectations" to a Pilotage Authority, laying out broad policy priorities for the medium-term.

But by and large, the Pilotage Authorities are intended to operate autonomously, without day-to-day interference from a Minister or central agency. Where a public entity is empowered to exercise a regulatory function in conditions of relative independence, it is usual for Parliament, through the enabling statute, to provide high-level guidance on the discharge of those powers.

The third concern is some stakeholders have suggested that a Purpose clause or a statutory declaration of principles could address specific irritants or concerns, mostly related to the cost of pilotage services delivered in a world without competing sources of supply. Some have suggested the *Pilotage Act* should impose a goal or duty of efficiency on the Pilotage Authorities. Others have called for entrenching good-management principles: continuous improvement, adoption of cost-cutting technology, best management practises. Several asked for a commitment in the *Pilotage Act* to a risk management approach to issues of navigational safety.

Background and Rationale

Enabling statutes that create regulatory programs or entities may contain – in addition to a Preamble setting out the context and rationale for legislative action – a *Purpose clause*, a statement of *policy principles* applicable across the regulatory program or a *statement of objectives* for the regulatory body they create. We can find examples of each of these three approaches in federal transportation statutes.

Purpose clause: The *Canada Marine Act*, a machinery-of-government statute with many similarities to the *Pilotage Act*, provides the statutory basis for the operation of Port Authorities, public ports and the St. Lawrence Seaway. The *Canada Marine Act* begins with a nine-item Purpose clause that recognizes "the significance of marine transportation to Canada and its contribution to the Canadian economy." A key purpose is ensuring that marine transportation services "are organized to satisfy the needs of users and are available at a reasonable cost to the users," while managing marine infrastructure and services "in a commercial manner." Other purposes are: to provide for "a high level of safety and environmental protection" and "a high degree of autonomy for local or regional management," while fostering "harmonization of standards among jurisdictions."

> *"...purpose clauses should not be included in a bill without carefully thinking about what they would add to the bill and what they would contain. They should not be used to make political statements. They can have a significant impact on how the legislation is interpreted by the courts... Purpose clauses: indicate what the intended results of the legislation are; should highlight only the principal purposes; are included in the body of the legislation; generally have a greater effect on the interpretation of legislation than preambles."*
>
> ***Guide to Making Federal Acts and Regulations 2nd Edn., p. 85***

The *Canada Shipping Act, 2001* sets out legislative objectives rather than purposes but the difference is largely cosmetic. Among its objectives, it lists: i) protecting the health and well-being of people engaged in marine transportation and commerce; ii) promoting safety in marine transportation (and recreational boating); iii) protecting the marine environment; iv) regulating in a manner that encourages viable, effective and economical marine transportation and commerce; and v) promoting an efficient marine transportation system.

> *"We believe the most critical issue to be addressed is to clearly identify the purpose of the Pilotage Act. A number of the other issues under consideration such as governance and safety can be better addressed once this primary issue is resolved."*
>
> ***British Columbia Coast Pilots Ltd. submission, p. 11***

Policy principles: The *Canada Transportation Act* provides the prime example of legislated policy principles for the transportation sector. In section 5, Parliament declares a National Transportation Policy, which begins:

> *"It is declared that a competitive, economic and efficient national transportation system that meets the highest practicable safety and security standards and contributes to a sustainable environment and makes the best use of all modes of transportation at the lowest total cost is essential to serve the needs of its users, advance the well-being of Canadians and enable competitiveness and economic growth in both urban and rural areas throughout Canada."*
>
> ***Canada Transportation Act, section 5***

The section continues with a declaration of implementation principles to achieve this goal – e.g., reliance on competition and market forces to provide needed services, with recourse to regulation and strategic public intervention to achieve outcomes that markets cannot provide.

The Policy is intended to apply to all modes and to all federal transportation programs, including regulatory programs. An illustration of this is the Objectives section of the *Motor Vehicle Transport Act*, which makes the linkage explicit: "The objectives of this Act are to ensure that the National Transportation Policy set out in section 5 of the *Canada Transportation Act* is carried out with respect to extra-provincial motor carrier undertakings…"

The National Transportation Policy is intended as a declaration of policy, not as an enforceable legal instrument. But even a policy declaration can be given some legal weight – e.g., by requiring a Minister or agency to "consider" or "take into account" the policy's principles when taking a regulatory decision, issuing a discretionary permission or establishing a program. In the *Pilotage Act*, inconsistency between a proposed tariff and the National Transportation Policy is already grounds for lodging a tariff challenge with the Canadian Transportation Agency.

<u>Statement of Objectives:</u> The *Transportation Accident Investigation Board Act* and *Canadian Air Transport Security Authority Act* each contain a detailed statement of objectives – a statutory mission statement – for the body it creates. In undertaking the "effective and efficient screening" of persons and their property, the Canadian Air Transport Security Authority is bound to act "in the public interest, having due regard to the interest of the travelling public," while "ensuring consistency in the delivery of screening."

By contrast, the mission statement for Pilotage Authorities in section 18 of the *Pilotage Act* is terse, referring only to the establishment of an "efficient" pilotage service "in the interests of safety." Clearly, there is scope to indicate more clearly in the *Act* the objectives the Pilotage Authorities are meant to pursue and *how* they should pursue them.

Introducing a statement of legislative objectives or policy principles into the *Pilotage Act* would be a positive step that would provide clear and helpful guidance to all government actors, stakeholders and the public. It would bring the *Pilotage Act* into the mainstream of current statutory practice, with other federal transportation statutes. It would increase predictability and transparency, by setting benchmarks against which decisions, outcomes and performance can be measured.

The second point is that new legislative provisions should provide meaningful guidance without creating an additional means of legal recourse against disputed decisions and actions. As outlined above, the *Pilotage Act* already provides multiple checks and balances respecting actions

affecting both individuals (e.g., licence issuance) and groups (e.g., pilotage tariffs). The wording of a Purpose clause, declaration of policy principles or statement of objectives may be relevant to these processes of challenge and review. But it should not create an unplanned additional avenue for challenges, such as judicial review by the Federal Court.

The third issue is the actual content of the policy guidance.

First, we would expect to see some linkage to the National Transportation Policy, through a direct reference or by the adaptation of some of its key elements – e.g., a "competitive, economic and efficient national transportation system" enabling "competitiveness and economic growth;" or a commitment to meeting "the highest practicable safety and security standards." The public objectives should include ensuring the safety of navigation and supporting marine transportation and commerce by providing professional pilotage services that are responsive to users' needs.

Second, there appears to be broad consensus among users of pilotage services that the legislation should make an explicit commitment to maximizing efficiency in the delivery of the pilotage program. The need is all the more pressing in the absence of any broad support for containing costs through competition. The primary concern of stakeholders is to ensure that efficiency is maximized in the operations of the Pilotage Authorities themselves. However, the pursuit of cost-efficiency can have broader dimensions – e.g.: expanding the use of alternatives to licensed pilots. "Encouraging" or "maximizing" efficiency – consistent with safety and other public-interest goals – should be applied system-wide, not confined to the Pilotage Authorities' operations alone.

Third, given the mandatory nature of pilotage and the monopoly conditions under which the Pilotage Authorities operate, there is an appetite for a clear commitment by government to transparency, accountability and stakeholder engagement. Statutory principles or objectives could provide a conceptual umbrella for concrete new actions authorized in the body of the *Pilotage Act*.

Fourth, the tariff-setting authorities in the *Pilotage Act* could be linked formally to the *Pilotage Act*'s purpose and objectives. An explicit, high-level statement that clarifies the mandate of the management board with respect to fee-setting would improve accountability and transparency and ensure that fees and tariffs fixed by the Pilotage Authorities are consistent with the legislation's purpose and objectives.

Finally, it could be useful to include language on some desirable attributes of the future pilotage system, including: technological innovation and continuous improvement, and application of a risk management approach.

Courtesy of the Great Lakes Pilotage Authority pilots

Recommendation 1

I recommend that the *Pilotage Act* be amended to enhance policy clarity, predictability and national consistency, through an expanded statement of legislative purposes, and governing policy principles. The new provisions should be substantially consistent with the National Transportation Policy and could comprise:

A Preamble, setting out the rationale for legislative action and the linkages to the broader public interest, including environmental protection.

A Purpose clause that clearly outlines the government's legislative purpose – the establishment of a safe, efficient, responsive and accountable national system of marine pilotage as a regulated monopoly – and the public outcomes the legislation is meant to secure.

A statement of governing policy principles for the national marine pilotage system, including: ensuring the highest practicable standards of safety; efficiency and cost-effectiveness in service delivery and responsiveness to users' needs; application of risk management principles in decision-making; optimize the use of new technologies and continuous improvement of operations and services; transparency and accountability in all parts of the pilotage system; financial self-sufficiency of Pilotage Authorities; and fairness and reasonableness in fee- and tariff-setting.

The purposes and principles outline the goals for not only the Pilotage Authorities but for the entire marine transportation system and therefore may require some accompanying technical amendments to other Articles. Further, these objectives or principles could be used by the Minister of Transport in his letter of expectation to the Pilotage Authorities to establish key performance indicators or priorities for the coming year.

3.2 Code of Conduct / Code of Ethics

Pilots hold strongly to their independence as professionals, asserting a need to exercise independent judgement in critical situations and, day-to-day, to operate largely without supervision by government, vessel owners and ship's captains. Their positive safety record across thousands of pilotage assignments suggests that public faith in their skill and professionalism is well founded.

But in a situation with so little structure – so few checks and balances – it is not surprising that disputes occasionally arise over *how* pilots discharge their functions and exercise their independent judgement. In the course of public consultations, we also heard rare stories of pilots whose actions put safety at risk, whom the Pilotage Authorities were powerless to pursue under a *Pilotage Act* with few enforcement "teeth."

As the public grows steadily more risk-averse and the "social licence" for marine transportation declines, it may be timely to reappraise the pilotage system's performance safeguards. One possible avenue is the development of a code of professional conduct or ethics, to which all pilots would be subject.

Background and Rationale

In law, there is no governing framework of professional practice for pilots. After a pilot is licensed, the various regulatory authorities set few requirements governing the actual conduct of the licence-holder. Pilots – though they work in close collaboration with vessel masters, the Pilotage Authority and their own colleagues – perform their duties largely without day-to-day supervision. As professionals, pilots describe their ability to exercise independent judgement and to operate independently as a cornerstone of navigational safety.

Access to the profession – the issuance of a pilot's licence – requires a demonstration of skill, knowledge and experience. The requirements for licensing are established through regulations: Pilotage Authorities make regulations under paragraph 20(1)(f) of the *Pilotage Act* prescribing the qualifications a licence holder must meet; the Governor in Council may also make regulations under section 52 of the *Pilotage Act* prescribing minimum qualifications of licence holders.

On their face, the regulations suggest an overwhelming focus on testing applicants' technical skills and subject-matter knowledge, rather than higher-order competencies. For example, the *Great Lakes Pilotage Regulations* contain only a single reference (paragraph 13(1)(f)) to examining the applicant's knowledge of "the duties, responsibilities and obligations of a pilot."

Once a licence is issued, there is almost no formal oversight or fixed rules applied to licence-holders by the licensing authority or other regulatory body. Employee pilots are subject to a manager's direction and oversight but pilots who are part of a pilot corporation – the majority of pilots – are not. The *Pilotage Act* itself establishes only a minimal list of duties and

prohibited forms of conduct (Subsections 25(3) and (4) prohibit piloting when incapacitated by mental or physical disability or by alcohol or drugs). Subsection 26(1) outlines the circumstances in which a master may supplant a pilot to avoid harm to the ship.

Though the formal regulatory framework governing pilotage operations is scanty, a number of national and international tools provide pilots with guidance on best operating practices. Committees of the International Maritime Organization have developed practical guidance on operating practices, communication and collaboration; a key document is International Maritime Organization Resolution A960 on Pilotage, Annex 2: "Recommendation on training and certification and on operational procedures for maritime pilots other than deep sea pilots."

As well, the "International Best Practices for Maritime Pilotage" of the International Chamber of Shipping proposes minimum standards for pilotage services and clarifies Masters' and pilots' roles and working relationships. Chapter II in the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers addresses Master and Deck Department, specifically the respective roles of pilot and the master or officer of the watch. Other guidance is disseminated in federal publications and industry advice to members – e.g. the Canadian Coast Guard's "Recommended Code of Nautical Procedures and Practices" and the Canadian Marine Pilots' Association's "Master-Pilot Information Exchange Guidelines."

All these tools are advisory only; they do not have the force of law and thus are not enforceable. Moreover, they primarily deal with operational matters, rather than addressing more abstract issues of ethics and professional conduct. Clearly, there is a gap in standard-setting for pilots' conduct that these instruments of operational advice cannot fill. In filling the gap, it will be key to build on and around these existing instruments, rather than displacing them or creating confusing overlaps.

> *"Maritime pilotage is one of the few industries without any formal structure for accountability. Even with compulsory pilotage, the "customer" is in a position where he has little influence over the quality of the service he receives."*
>
> ***Intertanko website article "International Best Practices for Maritime Pilotage," November 2002***

The second apparent gap is the gap in pilots' accountability. Pilots' independence is not balanced by a robust system of accountability to the regulator – other than for the most egregious actions – and to the company that pays for the pilot's services. Unlike employee pilots, who are subject to discipline by the Pilotage Authority's management, members of a pilot corporation are subject to a minimal set of possible sanctions. Criminal provisions of the *Pilotage Act* are few and licence suspension and cancellation is very narrowly focused.

Licence suspension and cancellation is primarily a remedy for infractions relating to pilot incapacity (e.g. alcohol and drug use). Under subsection 27(1), the Chair of a Pilotage Authority may also suspend a pilot's licence where a pilot "has been negligent in the duty of the licensed pilot" but this is not defined. Under section 40, a licensed pilot is liable only to a maximum of $1,000 for damages occasioned by "fault, neglect or want of skill." This low ceiling may increase the perception that pilots are not held accountable.

In the absence of fixed regulatory requirements or *ex-post-facto* disciplinary mechanisms, some stakeholders have suggested there is a need for an over-arching system of control: a code of professional conduct, fixed rules of practice and procedure, or more direct oversight by Pilotage Authorities.

A distinct issue of pilot conduct is the scope for conflict of interest arising from active pilots' participation on Boards of Directors that set tariffs and negotiate contracts with pilot corporations. If active pilots are to continue on these Boards, there may be a need for some further protections beyond the current conflict-of-interest rules for public appointees. For a discussion of Boards of Directors and some possible reforms, see Chapter 4.

> *"Code of Ethics: Entrust the Pilotage Advisory Committee with the task of developing a national code of ethics and a code of conduct that sets out the rules of professional conduct for the pilot."*
>
> ***Groupe Desgagnés Inc. and Fednav Ltd. submission, p. 3***

There is no shortage of models for codes of professional practice that could be applied to Canadian marine pilotage. Pilots' professional bodies have developed their own statements on pilot conduct to guide their members. The British Columbia Coast Pilots' ethics policy and the Canadian Marine Pilots' Association's Code of Conduct are concise, high-level statements. These address both the professional duties of individual pilots and the pilot's relationship with the parent organization. They offer useful models that could be further developed in a national exercise.

Civil aviation provides many examples of codes of conduct, both for commercial pilots and the general aviation community. The Air Line Pilots Association, the world's largest pilot union comprising staff of 33 airlines in Canada and the United States, has produced a noteworthy example.

A scan of international practices could also identify useful models. For example, the Australian Pilotage Group Proprietary Limited has developed a corporate code of ethics for its marine pilots that contains more detailed operational prescriptions than the two Canadian examples.

The Australian state of New South Wales has integrated standards of conduct for marine pilots into the formal regulatory framework for pilotage. The Marine Pilot Professional Conduct Standards appear as Schedule 4 to the Marine Pilotage Code, Volume 1; a subordinate instrument to the Marine Safety Regulation 2016. The Pilotage Code was developed with input from Harbourmasters and marine pilot representatives from the pilotage ports of New South Wales, as well as the Australian Maritime Officers Union. The standards in Schedule 4 form "a framework of personal and professional conduct and procedures for marine pilots." They cover issues such as conflicts of interest, availability for work, communications and relations with vessel masters, the reporting of incidents, and circumstances that justify the refusal to pilot a vessel. The requirements apply in conjunction with any standards, codes, or instructions issued by an individual Port Authority.

The option of enacting a code of conduct or code of ethics as a national regulation could help bridge the gap in formal accountabilities for pilot conduct, especially if a system of administrative monetary penalties were created to handle minor regulatory infractions of the *Pilotage Act* and regulations. The published code could be "incorporated by reference" into a short regulation that makes breaches of the code a regulatory offense and establishes a schedule of penalties.

Recommendation 2

I recommend that the government make a commitment to developing and implementing a code of conduct for all licensed marine pilots, either as a regulation or as professional guidance, through a deliberative process undertaken by the National Advisory Committee, whose creation I propose later in this report.

CHAPTER 4

GOVERNANCE

Governance is the framework of structures, rules, and practices that serve to enhance an organization's viability and prosperity. It is also the way that the organization manages its relationship with stakeholders and promotes accountable, fair, and transparent decision making. Crown corporations are subject to a variety of mechanisms within the *Financial Administration Act* and individual legislation to ensure that these organizations achieve their mandate, support sound stewardship of public funding, and are accountable to Parliament.

For the Pilotage Authorities, the key question is whether the Crown corporation structure is the most appropriate way to achieve public goals associated with safe and efficient navigation. Secondly, there is also the matter of how to design the governance structure for the delivery of pilotage services so that it can achieve these goals. The previous Chapter discussed approaches to clarifying and elaborating the purpose of the *Pilotage Act* and mandate of the Pilotage Authorities. Regardless of some of the other concepts that could be incorporated into the purpose statement, it is clear that safety and efficiency will remain fundamental elements, along with financial self-sufficiency, which can be defined as setting fair and reasonable tariffs that are adequate to cover costs (it is unlikely that the Government would consider subsiding Pilotage Authorities having ended this practice in 1998). This is consistent with the mandates of most pilotage organizations around the world. Finally, although Boards of Directors manage, monitor and mitigate risks now, if risk-management is also incorporated as part of the official purpose of the *Pilotage Act*, this may result in changing the way that the Boards of Directors approach these tasks.

In recent years, the issue of the governance of pilotage services in Canada has been raised in various public discussions. Aside from discussions with stakeholders and the Pilotage Authorities in the course of the present Review, the most recent discussion was in the 2016 *Canada Transportation Act* Review. That review recommended amalgamating the four Pilotage Authorities in order to promote more national consistency and to seek operating efficiencies and potentially lead to lower costs. None of the other previous reviews of pilotage issues has addressed the issue of whether the use of four regional Crown corporations is the most effective way to deliver marine pilotage services.

The Pilotage Authorities have historically had a Board of Directors composition comprised of two public representatives, two pilot representatives, and two representatives from the shipping industry. In 2016, the Government of Canada implemented a new process for Governor in Council appointments. This process is based on the following principles: open, transparent, and merit-based selection processes that are representative of Canada's diversity. Therefore, while the traditional sectoral structure of the Board of Directors for marine pilotage was seen as highly valuable by stakeholders and the Pilotage Authorities, it is inconsistent with the new appointment process. In addition, recent special examinations conducted by the Office of the Auditor General of Canada, such as the 2016 Special Examination of the Atlantic Pilotage Authority and the 2018 Special Examination of the Great Lakes Pilotage Authority, raised questions regarding conflict of interest and the need for clear mitigation strategies.

Recurrent questions arising in the current discussions include: Could pilotage services be provided more efficiently and at lower cost if Pilotage Authorities and their operations were consolidated? How can evolving navigation and communications technology, and risk management techniques be applied to continually improve safety and efficiency performance? How can Boards of Directors be constituted so that their members have appropriate qualifications and skills, and can fulfil their responsibilities without conflict of interest? How can the governance and management of pilotage services be systematically informed by the knowledge, expertise, and experience of the broad range of stakeholders, governmental authorities, and other interested parties from across Canada? How can pilotage services be overseen and managed so that they contribute to broader local, regional, and Canada-wide marine and other transportation strategies?

Relying on research on the governance of pilotage services in Canada and around the world, and discussions with stakeholders and the four Pilotage Authorities, this chapter sets out, assesses, and recommends options for the governance of pilotage services in Canada.

Background

Evolution of ideas and practice since the *Pilotage Act* came into force

Ideas, policies, legislation, and practice concerning governance have changed significantly since the *Pilotage Act* came into force in 1972. Most Crown corporations at that time operated with relatively little consistent oversight by the Government or Parliament.

As noted in the opening chapter, the addition of Part X to the *Financial Administration Act* in 1984, created extensive new responsibilities for both Crown corporations and the Government that directly concern the governance of Pilotage Authorities. Even though, as Schedule III Crown corporations, Pilotage Authorities have some latitude in implementing their mandate, the Government retains substantial control. Through such powers as the appointment of directors and the approval of plans, budgets, and regulations, the Government has significant powers and responsibilities concerning their governance.

By the mid-1990s, improving the quality of corporate governance in the private sector was seen as more important to performance than ever before,[2] and this perspective strongly influenced the Government of Canada's approaches to Crown corporation governance.[3]

In the 2005 Status Report to Parliament, the Auditor General included a chapter on Crown corporation governance that was informed by initiatives in both Canada and the United States.[4] At about the same time, the Government published a document entitled, *The Governance Framework for Canada's Crown Corporations*, which underlined the importance of the following principles: clarity of objectives and expectations, clear lines of accountability, transparency in the application of and compliance with rules, and a culture based on a solid ethical foundation.

In addition to these principles, recurrent themes in government documents on Crown corporation governance over the last quarter-century include the following:

- Boards of Directors need to play a strong role in directing their enterprise;

2 See, for example, *Where Were the Directors? Guidelines for Improved Corporate Governance in Canada*, Report of the Toronto Stock Exchange Committee on Corporate Governance in Canada, December 1994.

3 See, for example, http://www.tbs-sct.gc.ca/gov-gouv/intro/intro01-eng.asp

4 http://www.tbs-sct.gc.ca/crown-sect/gov/gov_e.asp

- Directors need to respect their fiduciary responsibility to the enterprise and bring an informed, independent mind to their responsibilities – whether or not they are appointed as representatives of stakeholder or government organizations;
- Boards should establish profiles outlining the qualities required of Directors for their enterprise to assist the Government in appointing Directors with the right qualifications and skill sets; and
- Governments should ensure high quality, timely appointments to boards of Crown corporations.

Other developments in public and private sector management influenced evolving thinking about governance. A public sector example is the routine reliance on progressively sophisticated forms of stakeholder and citizen engagement, supported by "open government"[5] initiatives, to formulate and implement public policies, regulations, and programs.

For pilotage services in Canada, this means that governance should be viewed as encompassing not only the roles and responsibilities of Pilotage Authorities and governmental authorities, but also the potential contributions to safe and effective pilotage of the full range of stakeholders and other knowledgeable, interested communities and individuals.

Governance of Pilotage in Foreign Jurisdictions

Research on governance of pilotage extended to major jurisdictions around the world: North America, South America, Europe, Asia, Australia, and New Zealand.

Although the research revealed interesting variations in the governance of pilotage, several patterns have emerged. In virtually all jurisdictions, pilotage services are delivered through a regulated monopoly. Very few jurisdictions allow competition among pilotage service providers. National or sub-national legislation provides the framework within which pilotage services are delivered. The single most prominent objective set out in legislation is safety – protecting people, vessels and other property, and the environment, while efficiency and competitive pilotage tariffs are other important legislated objectives.

Further, political authorities[6] hold substantial control over governance and management of pilotage services, making regulations and in some cases chairing bodies roughly comparable to Canada's Pilotage Authorities. Finally, in several major jurisdictions, Port Authorities oversee the provision of pilotage services. The particular maritime geography of these jurisdictions (e.g., the United Kingdom and most Australian states) seems to favour a prominent role for Port Authorities.

4.1 Models for Canadian Pilotage Authorities

Based on a mandate that continues to incorporate the fundamental elements of safety, efficiency, financial self-sufficiency, and risk management, this section considers six different operating models. These models are then evaluated according to factors considered to be important in achieving the mandate and promoting good governance and accountability in the organization.

5 See, for example, http://open.canada.ca/en

6 For example, legislatures, ministers or senior officials in national, sub-national, or municipal departments and agencies with responsibility for such functions as transportation, marine navigation, port management, business regulation, and the environment.

The first is safety, which has been considered as the most important goal of the marine transportation system. Therefore, in evaluating each model, it is important to consider whether the structure is likely to support continual improvements to safety performance. The second is efficiency. Many stakeholders have noted the need for a pilotage service that operates with a view to keeping costs low and providing adequate levels of client service. The third concerns the quality of decision-making. A good model will support informed, efficient decision-making, and give an effective voice to the stakeholders and other interested parties in the governance and management of pilotage services, and in helping to ensure that pilotage supports broader marine and other transportation strategies. The fourth concerns implementation. The greater the degree of organizational change, the greater the likelihood of significant transitional (and perhaps on-going costs), disruption, and risks to safety, reliability, and efficiency during the transitional phase. Finally, the last factor concerns public acceptance of the model in the eyes of stakeholders, Parliament, and the public (risk management). To be able to fulfill its mandate, the model needs to be widely viewed by people who know and care that it is well suited to the task.

Model 1: Retain the current Crown corporation configuration of four regionally based Pilotage Authorities

This model proposes no changes to the current structure of using four Crown corporations for the delivery of marine pilotage services in Canada. The Pilotage Authorities currently enjoy a very high safety record. If this structure was retained, there is good reason to expect that the solid safety record of the current Pilotage Authorities could be maintained.

Although pilots' organizations, and most other stakeholders noted the exemplary safety record of the Pilotage Authorities, it is generally possible to make continual improvements. As noted here and in other chapters, the Government has extensive powers and responsibilities related not only to governance and management of Pilotage Authorities, but also to transportation safety. The Government could use these powers to support continual improvements in safety performance. The Advisory Committee proposed later in this chapter could complement the efforts of Pilotage Authorities to enlist the knowledge, expertise, and experience of stakeholders, Indigenous Peoples, and other communities to continually improve safety performance.

Unlike safety, where the solid record of performance is widely recognized, ship-owners and other users expressed strong concerns about high pilotage fees. Many attributed high fees to the monopoly position of Pilotage Authorities and pilots' corporations, the statutory requirement to operate on a financially self-sufficient basis, and a lack of systemic incentives to reduce costs and continually improve efficiency.

Improvements could nonetheless be successfully pursued through collaborative efforts of the Pilotage Authorities, the Government, and the proposed Advisory Committee.

Since this option is the status quo with enhancements, there would be no significant implementation costs or disruption. The proposed change in the composition of the Boards of Directors discussed later in this chapter could be readily implemented. Finally, this model should continue to enjoy public acceptance with the added strength that regional models can respond to local issues.

"In respect to the amalgamation of Pilotage Authorities we feel that this would not be a reasonable action in the light of the regional differences across Canada. On the face of it, provision of Pilotage services in all areas of the country may seem to be identical, but in fact the different types of shipping, navigational uniqueness and geography, meteorological conditions and prevailing local language, all combine to require a regional Pilotage authority. The local Authorities are approachable by the industry they serve. Removal of this established order to a remote, absentee type of governance would be detrimental to the efficiency and safety of the transportation system."

Council of Marine Carriers submission, p. 5

Models 2 and 3 – Partial Amalgamation of the Pilotage Authorities

The principal rationale for the consolidation would be to reduce costs related to the governance, management, operations, and facilities, while supporting greater consistency in policies, procedures, and regulations.[7]

There are two possibilities. First, the Laurentian Pilotage Authority, the Great Lakes Pilotage Authority, and the Atlantic Pilotage Authority would be consolidated, and the Pacific Pilotage Authority would remain essentially as it is. Second, a reduced level of amalgamation would consolidate the Laurentian Pilotage Authority and the Great Lakes Pilotage Authority, including management, operations, administration, assets and facilities. With partial amalgamation of the Pilotage Authorities there is good reason to expect that the solid safety record of the current Pilotage Authorities could be maintained. Careful attention would need to be paid to maintaining the local knowledge required for safe pilotage services. Similarly, efficiency could continually be improved. *In principle*, the greater the degree of consolidation, the greater the likelihood of achieving efficiencies.

The most significant issue for amalgamation is implementation. Research commissioned by the Review identified areas where financial budgets could be significantly reduced by consolidating Boards of Directors, management, administration, operations, assets and facilities. At the same time, there is the potential for transitional and on-going costs that could complicate the achievement of net reductions in costs over the medium term, and perhaps even the long term. Examples of transitional costs include early pension payouts, penalties for early lease termination, and moving costs.

Examples of on-going costs include increased travel between headquarters and regions, higher compensation levels for directors, management and staff to reflect increased responsibilities, and possibly increased compensation for some pilots, management and staff as a result of legally-sanctioned obligations to harmonize compensation upwards to Canada-wide norms.

The disruption that inevitably accompanies the kind of consolidation associated with all the options except the status quo would also need careful consideration to ensure that pilotage services would continue to meet the highest standards of safety, reliability and efficiency through any period of transition.

7 Whether the authority to formulate regulations is transferred to Transport Canada has recommended. Pilotage Authorities would be expected to continue to play an active role in their development and implementation.

Any model that consolidates Pilotage Authorities partially or fully would attract the attention of stakeholders and other communities of interest. The principal concerns would be whether the consolidated Pilotage Authorities would be sensitive to local interests and be able to retain the local knowledge, expertise and experience essential for safety and efficiency and whether they are likely to improve service delivery.

One of the potential advantages of amalgamating the Great Lakes Pilotage Authority and the Laurentian Pilotage Authority is that they operate down the same contiguous waterway, through the St. Lawrence Seaway, and the type of work of each of these Pilotage Authorities is not entirely dissimilar, with long river and lake transits.

Although the two Pilotage Authorities work closely together now, if the two Pilotage Authorities are merged it is likely that procedures and policies would be harmonized. Coordinated service delivery is seen as the one of the main advantages to suggesting the amalgamation of these two Pilotage Authorities. Providing service through one Pilotage Authority down the entire length of "Hwy H2O"[8] may help to achieve some consistency for the users by harmonizing procedures (whether set in regulation or not), practices, and fee structures. If the recommendations in Chapter 7 to increase flexibility in tariff and fee setting are adopted, this may provide an opportunity for increased partnerships and may help to attract new business and increase traffic in the region.

The Great Lakes Pilotage Authority has issued over 300 pilotage certificates, while the Laurentian Pilotage Authority only has two active certificates at this time. Merging the two organizations would require that the certification programs be harmonized, which could result in more certification in the Laurentian Pilotage Authority's districts. Secondly, the Great Lakes Pilotage Authority has made information related to passage plans accessible on its website, a practice that could be mirrored for all districts under a merged Pilotage Authority.

However, there are some marked differences that may present some challenges to implementing this option. The Great Lakes Pilotage Authority coordinates delivery of its services with the United States organizations. In addition, the two Pilotage Authorities use different labour models (employee pilots and pilot corporations). Neither of these considerations are insurmountable. For example, the Pacific Pilotage Authority effectively uses both contract and employee pilots to provide service to industry and the Great Lakes Pilotage Authority has developed effective working relationships with the United States organizations, and there is no evidence that these could not be maintained with a larger organization.

If the two organizations are merged, then it will need to be renamed. In order to recognize the creation of a new organization and address the current inconsistency with the Laurentian Pilotage Authority, the new organization could be renamed as the St. Lawrence and Great Lakes Pilotage Authority, and its headquarters should be located in Montreal.

During a *Pilotage Act* Review Roundtable on Governance in 2018, it was clear that the model to amalgamate the Pilotage Authorities according to a geographic East/West split received almost no support from any of the stakeholders. The Atlantic Pilotage Authority provides primarily port pilotage, in four separate provinces, which is different than the services provided by the either the Laurentian or Great Lakes Pilotage Authorities.

8 http://hwyh2o.com/home/

Model 4: Create a single Crown corporation consolidating the four Authorities.

In this model, the governance, management, operations, administration, and facilities would be consolidated under one Crown corporation, mainly in one principal location.

With regard to safety and efficiency, a single Crown corporation would be better placed to pursue continual, coherent improvements in safety and efficiency. By the same token, it would need to make even greater efforts to ensure that it was sensitive to local interests and possessed the local knowledge, expertise, and experience needed to oversee and manage safe and efficient pilotage services in all the diverse ports and hazardous waterways of Canada. Cost savings are likely to be achieved due to economies of scale, and some initial investments would be needed to facilitate the transformation.

Perhaps the greatest advantage to pursuing the amalgamation of the four Pilotage Authorities is the ability to achieve national consistency and to concentrate marine pilotage expertise within one organization. A single Crown corporation would be well-placed to formulate and implement consistent policies, procedures, and regulations across Canada, which may help to improve the customer's experience. It would also be well placed to collaborate efficiently with national and regional stakeholder organizations, the Canadian Coast Guard, other governmental authorities, Port Authorities, and international organizations. Through consolidation, the single Pilotage Authority would be better able to advocate for changes, implement new technological advances, and achieve financial self-sustainability.

Traffic-related risks could be shared across the four jurisdictions, which may allow the Pilotage Authorities to build larger financial reserves, compensating for periodic fluctuations in some areas. As the new organization would remain a Crown corporation, it would still be bound by the requirements in the *Financial Administration Act* and have to prepare an annual corporate plan for Governor in Council approval, as well as, a corporate plan summary and annual report that are tabled in Parliament. All of these requirements help to support transparency and accountability for the delivery of marine pilotage services. Similarly, if required, the Governor in Council could intervene to issue directives to address any urgent situations that require Government intervention.

Finally, a single organization may be best placed to address any new pilotage needs, such as a dedicated pilotage service in the Arctic. It can be anticipated that there would be some initial costs associated with establishing a new service and that a single, large organization would be better placed to manage this transition than any of the smaller models contemplated earlier in the Chapter.

An advantage of full amalgamation over partial amalgamation is that it can be presented as a sensible approach to efficient governance and management.

> *"There exists considerable frustration within our membership with the differences in dealing with the different authorities, including how they are managed and operated, their policies, regulations, services and approaches to various operational issues. A single, national pilotage authority would create consistency in approach, while still allowing for regional differences where needed."*
>
> ***Chamber of Marine Commerce submission, p. 15***

However, there are significant concerns with regard to the issue of local responsiveness. From coast to coast stakeholder groups have highlighted how important it is to have a local connection to the Pilotage Authorities. There are significant concerns that atlantic issues or western issues may be lost in a large organization. There are concerns that implementation costs or the pressure to equalize pilot salaries are going to result in cost increases. Small regional offices to handle pilot dispatch may not provide the same level of service or responsiveness that all of the regions currently enjoy. As well, the Pilotage Authorities would have to develop comprehensive implementation strategies (human resources, operations, and facilities) and related transition resources, leading to more efficient and effective implementation than under partial consolidation models.

While there are advantages to amalgamation that outweigh any initial investments that would need to be made to establish the structure, there is a lack of support from stakeholders including from some of the users. For this reason, full amalgamation is not a viable option at this time. However, it is possible that this idea can be revisited in the future, and the benefits of amalgamation may become more apparent once there is some evidence that it improves the customer experience, can generate some economies of scale and still respond to local issues.

Model 5: Create a single not-for-profit corporation based on the St. Lawrence Seaway Management Corporation model.

In 1998, the St. Lawrence seaway was commercialized under *the Canada Marine Act* to enhance competitiveness and to promote a commercial approach to its operation, including the management of its significant portfolio of capital assets. Responsibility for management and operations was transferred from the St. Lawrence Seaway Authority, a Crown corporation, to the St. Lawrence Seaway Management Corporation, established by major users of the seaway. The St. Lawrence Seaway Management Corporation is a not-for-profit corporation under Part II of the *Canada Not for Profit Corporations Act* and is not subject to the *Financial Administration Act*. The Government of Canada owns the seaway assets, and the St. Lawrence Seaway Management Corporation manages these assets and receives an annual statutory payment from the Government, primarily to offset costs related to infrastructure maintenance and renewal.

Model 6: Create a single not-for-profit corporation based on NavCanada model

NavCanada is a private, not-for-profit, non-share capital, corporation incorporated under the *Canada Not-for-profit Corporations Act*. Safety, security and technical matters are governed by the *Aeronautics Act* and *Canadian Aviation Regulations*. NavCanada operates pursuant to powers granted by the *Civil Air Navigation Services Commercialization Act* and is solely responsible for setting fees according to charging principles outlined in that Act. Users can appeal to the Canadian Transportation Agency if they believe these principles are breached when fees are amended or new fees are introduced.

Both the NavCanada model and the seaway model are similar, as they are both commercialized not-for-profit entities with significant public policy goals related to safe navigation. Given the similarities, they can be assessed jointly.

They differ slightly in terms of asset management, as the Government of Canada owns the seaway assets and NavCanada owns its own assets. Creating a pilotage corporation modelled on either of these would be similar to amalgamating all of the Pilotage Authorities into one Crown

corporation, in that governance, management, operations, administration, assets and facilities would all be consolidated and that there could be some cost savings as a result. It is likely that both models would maintain the high safety record and that there could be some efficiency gains as a result of a more commercialized approach to the delivery of marine pilotage services.

> *"An industry-driven governance model for pilotage/navigation is not only possible in the maritime domain, but is a model that has been demonstrated, over two decades in Canada's air industry, to improve safety while resolving long-standing issues of accountability, transparency and economic efficiency."*
>
> ***Cruise Lines International Association submission, p. 2***

The main – and significant – change is that the consolidated Pilotage Authority would be incorporated under the *Canada Not-for-profit Corporations Act*, would not be subject to the *Financial Administration Act*, and could not make regulations. This would give the new corporation significantly greater latitude to manage its affairs than a Crown corporation and require that the Government assume the responsibility for making all regulations that apply to pilotage.

The members of the pilotage corporation would be stakeholders such as pilots, the shipping industry, unions, and the Government of Canada.[9] Since the members would elect the board, it would be comprised mainly of representatives of stakeholder organizations and the Government of Canada. In line with the NavCanada and St. Lawrence Seaway Management Corporation models, the Chief Executive Officer would be a voting director.

While it is expected that the safety record would be maintained and that efficiency would be improved, it is expected that the Board of Directors would bring a more commercialized focus to the operations because many would be stakeholder representatives.

Implementation could be more complicated than for any of the other consolidation models because of the process of putting together the initial Board of Directors, drawing up articles of incorporation and bylaws, and finding an efficient way to transfer assets and liabilities from the Pilotage Authorities to the new corporation.

There could be reasonable public acceptance of a not-for-profit corporation to oversee and manage pilotage services. NavCanada and the St. Lawrence Seaway Management Corporation have good reputations for overseeing and managing major operations where safety is paramount and efficiency crucially important. However, the organization would have to determine how best to support and respond to local issues.

In conclusion, the models of partial or complete consolidation offer the prospects of similar or improved safety performance, lower operating costs, improved efficiency, and greater consistency in policies, regulations, and procedures. Depending on how the model was implemented, there is the potential for transitional costs that could increase the overall costs of providing pilotage services over the medium term, and possibly even the long term, for example, related to employee transition. They would also create a risk of disruption to the reliability, and

9 The member representing the Government of Canada would be neither an elected nor an appointed official, but a person qualified as a director and with knowledge of maritime affairs.

efficiency of pilotage services, particularly if the funding of transitional costs proved inadequate. The greater the consolidation, the greater the effort and resources required of Transport Canada to drive the process.

The main advantage of the status quo is that there would be no transitional costs or disruption. While the challenges of continually reducing costs and increasing efficiency would persist, a more prominent role for Transport Canada in exercising the Government's powers and regulatory responsibilities relating to Pilotage Authorities, and effective use of the proposed Advisory Committee could help address these challenges.

While there are many clear advantages to amalgamating the four Crown corporations, there is a lack of support for this transition due to the risk of cost increases and the potential for a reduction in local responsiveness. Given this, amalgamating the Great Lakes and Laurentian Pilotage Authorities has many advantages, and would also allow time to assess the impact of amalgamation on the delivery of marine pilotage services.

Recommendation 3

I recommend that the Great Lakes Pilotage Authority and the Laurentian Pilotage Authority be amalgamated into the St. Lawrence and Great Lakes Pilotage Authority, headquartered in Montreal, with a view to reducing costs, increasing efficiency, and providing a basis for assessing the feasibility and desirability of more extensive consolidations.

4.2 Options for the Board of Directors

This section focuses on options for the composition, skill sets, and method of appointment of directors.

Best practices for Boards of Directors

Directors' responsibilities can be illustrated under five themes: setting strategic directions, identifying principal risks, guiding management, assessing performance, and accounting publicly for results. Contemporary thinking on corporate governance favours relatively small boards of independent-minded, knowledgeable, experienced Directors who can decide efficiently how best to advance the goals of the enterprise.

Deep subject matter knowledge, while valuable, is not always essential. A competent Chief Executive Officer and management should be able to provide their Board with the information it needs to make effective decisions. Using formal or informal advisory and consultative mechanisms and processes is one way that a Chief Executive Officer and management can develop information needed by the Board that is beyond their own expertise.

As the scope and complexity of a Board's responsibilities expand there may be a case for also expanding its membership. However, even the boards of large, complex private sector corporations with global operations, such as many comprising the S&P 500, are of modest scale, the majority ranging between nine and twelve directors.[10]

10 2017 Spencer Stuart U.S. Board Index

For Crown corporations, conflicts of interest can usually be managed by ensuring compliance with statutes such as the *Financial Administration Act* and the *Conflict of Interest Act.* For both Crown and not-for-profit corporations, by-laws, and best practices such as recusal from voting on issues of personal pecuniary interest, can help to minimize conflict of interest.

Even though some Chairpersons of private sector corporations are also Chief Executive Officers, the idea of combining the roles of Chairperson and Chief Executive Officer has not found much support in recent years and is inconsistent with Government of Canada guidelines on Crown corporation governance.

Although Chief Executive Officers often sit as voting directors in the public, private, and not-for-profit sectors, federal government guidelines on Crown corporation governance dating back more than two decades imply that Chief Executive Officers not to serve as directors.[11]

It has been common practice among Pilotage Authorities and other Crown corporations to have the Chief Executive Officer participate in most Board meetings, including those concerned with the formulation of strategies, plans, and priorities. In practice, therefore, many Chief Executive Officers may already be operating as if they were non-voting directors, *ex officio.*

Process for the appointment of Directors by the Governor in Council

The process for making Governor in Council appointments has been centralized and elaborated in recent years. Although Ministers remain responsible for managing Governor in Council appointments within their portfolio, and must of course follow statutory requirements, they are guided by the principles underlying the new process: openness, transparency, merit, and diversity.

Among the advantages of the new process is that it may lead to an expansion of the pool of candidates normally considered for appointments such as those to the Pilotage Authorities. At the same time, the new process does not give priority to traditional appointment considerations such as those followed in making appointments to the seven-member Boards of the current Pilotage Authorities (two pilot representatives, two representatives of the shipping industry, two representatives from the public, and a Chairperson).

Models for the Composition of the Board of Directors

The models considered here correspond to the different operating models discussed above for Pilotage Authorities. The two main options that were considered within the scope of the Review were whether to retain and enshrine in legislation the historical composition of the Board of Directors, or to continue to follow the current government process.

Throughout the Review, there was a high degree of consensus that the historical model functioned well:

11 The chief executive officers of not-for-profit corporations such as NavCanada and the St. Lawrence Seaway Management Corporation are full voting members of their boards.

> *"Two pilots and two user representatives were selected to sit on these Boards with the three other members of the Board representing the public interest. It is very important to maintain the mix listed above as to continue the work the Boards have done in providing safe pilotage. The GLPA does support the full transparency of the Board appointments but recommends that the forty-five (45) years of practice of having two representatives from the pilots and industry groups be maintained and reflected in the changes to the current Pilotage Act."*
>
> ***Great Lakes Pilotage Authority submission, p. 3***

However, during the *Pilotage Act* Review Governance Roundtable stakeholders did discuss that the issue that was central to their concerns about the new process was whether the candidate had maritime expertise, and general recognition that this was important quality to help support a Pilotage Authority's Board of Directors in making quality decisions. It was also acknowledged that there is a need for balance and other skill sets on the Board – e.g., lawyers, accountants, etc. The Chief Executive Officer would be a non-voting director, *ex officio*.

Therefore, recognizing that Directors' responsibilities are to set strategic directions, identify principal risks, guide the management of the organization, assess performance, and account for results publicly, a Board comprised of representatives that do not represent a specific sector (i.e., a neutral Board) would be able to adequately perform these tasks.

> *"Structure the board so that varying interests are represented without any one dominating. The chair and board members should be appointed by the Governor in Council. The chairs and the members should not represent special interests in their function and they have a fiduciary duty to act in the best interests of the administration. CEOs must be appointed as ex officio members of their board."*
>
> ***Groupe Desgagnés Inc. and Fednav Ltd. submission, p. 4***

As well, there is the fundamental question of Board independence. Directors have the fundamental responsibility under law to act in the best interests of the organization and to exercise due care and diligence. Section 109 of the *Financial Administration Act* outlines the management responsibilities of the Board of Directors, while section 115 outlines the Director's duty of care, and section 116 addresses conflict of interest. In addition, the Pilotage Authorities have also developed their own strategies to manage conflicts of interest, such as developing a conflict of interest code, or requiring that Directors' recuse themselves from certain decisions. It is also important that these mechanisms are used as intended and that the Pilotage Authorities can demonstrate that they are effective, or it may result in a loss of confidence in the Pilotage Authority.

> *"The Corporation could not demonstrate that it fully complied with its directive on conflicts of interest."*
>
> ***2018 Special Examination of the Great Lakes Pilotage Authority, p. 7***

The historical Board of Directors composition may not address the "risk of real, potential, or ***perceived conflicts*** of interest because they oversee amendments to tariff regulations, as well as collective bargaining and changes in contracts."[12] As the submission from the Cruise Lines International Association notes:

> *"Neither National Boards nor regional authority board should include active industry or working marine pilots as a board member. As in the NavCanada and Port Authority models, members should be appointed for a position on the Board to represent specific pilotage user groups."*
>
> ***Cruise Lines International Association submission, p. 3***

Regardless of the of the mechanisms in place to address conflict of interest and their effectiveness, mitigation against the perception of conflicts can often prove to be very difficult. As noted in testimony from representatives from the Office of the Auditor General before the House of Commons Standing Committee on Public Accounts, "We are concerned, as outlined in the report, that the very basis of a representational board can create some challenges in terms of the perception of the conflicts of interests. That is why we recommended that actions be taken to deal with and try to mitigate those perceptions."[13]

Therefore, as it is extremely difficult to mitigate against perceived conflicts, it may be more appropriate to proceed with a neutral Board of Directors and to ensure that there are appropriate mechanisms in place to address conflict of interest. All Directors would be expected to have Directors' qualifications. An additional requirement for a "cooling off" period of one year for pilots or shippers would strengthen mechanisms for mitigating against perceived conflicts. Modelled on the Treasury Board of Canada's policy on Conflict of Interest and Post-Employment, the legislation could specify that active pilots or shippers would not be eligible for consideration for membership on any of the Pilotage Authorities' Boards of Directors until a minimum of one year has passed following their employment.

The addition of a Chief Executive Officer as a non-voting director, *ex officio*, would simply confirm current practice. Further amendments would outline that the Chairperson not assume responsibilities for the day to day management of the organization (e.g., suspension of licences).

Models 2, 3 or 4: Amalgamated Pilotage Authorities

Regardless of whether the Pilotage Authorities were amalgamated into three, two or one Crown corporation, a larger organization would need a larger Board of Directors to reflect the increased responsibilities.

12 2018 Special Examination of the Atlantic Pilotage Authority, p.3.
13 https://www.parlvu.parl.gc.ca/Harmony/en/PowerBrowser/PowerBrowserV2/20180207/-1/8761

It is likely that a nine-person Board of Directors could continue to effectively govern an amalgamated Great Lakes Pilotage Authority and Laurentian Pilotage Authority, or one Crown that also includes the Atlantic Pilotage Authority, and there is no reason that a neutral Board comprised of nine Directors would not be able to govern a merged organization. Extra members would be necessary to support regional representation for the newly merged organization.

However, a fully amalgamated Crown corporation would require a slightly larger Board to reflect the increased responsibilities. One Crown corporation would likely require an eleven-member Board of Directors to ensure linguistic capacity, reflect the need for regional representation, and an increased range of responsibilities. To support regional representation, it would be worthwhile to consider designating a minimum of one member from each region (i.e., Atlantic, Ontario, Quebec, and Pacific), as well as, four or five other Directors.

Models 5 or 6: Single not-for-profit corporation based on the St. Lawrence Seaway Management Corporation model or on NavCanada.

Based on the Board of Directors for both the St. Lawrence Seaway Management Corporation or NavCanada, illustrative examples of the members of the not-for-profit corporation are representatives of organizations such as the Canadian Marine Pilots' Association, the shipping industry (domestic and foreign), the Canadian Merchant Service Guild and other unions, and the Government of Canada.

Under these models it is assumed that these "members" would elect an eleven-person board comprised of the following membership.

- One director elected by the Canadian Marine Pilots' Association;
- Four directors elected by the shipping industry (including two representing foreign carriers);
- One director elected by the Canadian Merchant Service Guild;
- Three directors elected by the Government of Canada,[14] one of whom would represent Indigenous communities;
- One Director elected by the Board; and
- One Chief Executive Officer (voting member)

This structure would reflect the Board of Directors composition of the current not-for-profit commercialized entities included for consideration in the Review. This model may facilitate a more commercialized approach to pilotage issues, but this would not negate the need for the Board to fulfill the core elements of its mandate related to the stewardship of the organization.

Finally, to the extent that specialized knowledge, expertise, and experience needed to guide management are required, these should be accessible to the board through three main sources: Directors appointed on the strength of their backgrounds, knowledge, expertise, and experience of the Chief Executive Officer and their team, and through a variety of informal and formal advisory and consultative mechanisms (more on this in the next section).

Each of the Board of Directors models should be capable of maintaining the solid safety record of the current four Pilotage Authorities. As noted for the "operational model," the greater the consolidation of the Pilotage Authorities, the greater the possibility of adopting a sharper more consistent focus on safety and efficiency performance.

14 The director "elected" by the Government of Canada would not be an elected or appointed official.

The greater the consolidation, the greater the ability of Boards of Directors to develop consistent, sophisticated approaches to implementing their safety and efficiency mandate and supporting local, regional, and Canada-wide marine and other transportation policies.

The reconfiguration of Boards of Directors would pose few challenges by comparison with the options for consolidating the management, operations, administration, assets and facilities of the Pilotage Authorities.

Recommendation 4

I recommend that the Board of Directors for the merged Great Lakes Pilotage Authority/Laurentian Pilotage Authority be comprised of nine members. I also recommend that the Board of Directors of the Atlantic Pilotage Authority and the Pacific Pilotage Authority be comprised of seven members, and the Chief Executive Officer, *ex officio*, as a non-voting member in both cases.

Recommendation 5

I recommend that persons who have a current relationship with or interest in any organizations comprising or representing pilots or shipowners should not be eligible for appointment as Directors, and for at least one year after leaving the position. Finally, the Chairperson should not perform the functions of the Chief Executive Officer or be responsible for the day-to-day functioning of the organization (e.g., suspension of a license).

4.3 Advisory Committee

This section proposes a formal advisory committee to complement advisory and consultative mechanisms and processes that the current Pilotage Authorities have been establishing and cultivating to support effective governance over the years.

In line with contemporary stakeholder and citizen engagement possibilities, these advisory and consultative mechanisms and processes should be two-way streets. They enlist the knowledge, expertise, and experience of stakeholders, and interested communities to support collaborative approaches to formulating and implementing policies, legislation, and programs. They provide a way to pool expertise and incorporate a broad range of expertise and create a connection to the community on specific issues.

For the Crown corporation options, the amended *Pilotage Act* would provide for the establishment of an Advisory Committee to support the Boards of Directors, and the Minister of Transport in fulfilling their responsibilities for safe and efficient pilotage and provide a national forum for discussion of pilotage issues. The Advisory Committee would comprise stakeholders, representatives of Indigenous communities, and representatives of communities of interest. The Secretariat for the Committee would be provided by Transport Canada.

The Advisory Committee would help ensure that the Directors had access to specialized knowledge, expertise, and experience to complement their own, and of the Chief Executive Officer. Further, the Committee would provide a way to help incorporate the knowledge of non-traditional stakeholders, who may have a broader interest in marine shipping (e.g., Indigenous communities).

For the not-for-profit corporate models, the articles of incorporation and by-laws would provide for the establishment by the Board of Directors of a stakeholder-based advisory committee to support the Board and management. The Secretariat for the Committee would be provided by the Corporation.

Recommendation 6

I recommend that the *Pilotage Act* provide for the establishment of an Advisory Committee comprising 15 members nominated for appointment by the Minister of Transport, representing a cross section of the Pilotage Authorities, pilots, pilot corporations, domestic and foreign shipping, Port Authorities, labour, Indigenous communities, environmental interests, and Government.

4.4 Including Indigenous Communities

Throughout the *Pilotage Act* Review engagement process, many coastal Indigenous communities expressed a clear need for safe and clean waterways to ensure the sustainability of their food, cultural practices, and economic development. Through the Roundtables, Indigenous people made a number of suggestions related to better equipment and training for emergency response and expanding compulsory pilotage areas to help minimize the potential for shipping incidents within traditional waters.

Discussions from the *Pilotage Act* Review Roundtable in Prince Rupert revealed concern regarding the impact of increased vessel traffic on potential incidents, and the sustainability of west coast marine staples such as salmon, shellfish, and cod. Consensus was also reached amongst participants that, given the potentially devastating impact of shipping incidents, there can be no compromises on safety. These concerns were rife, and off the tailwinds of the *Nathan E. Stewart* incident—a tug which sank in October 2016, spilling diesel and other pollutants in the Heiltsuk traditional territories.

> *"'The Heiltsuk were never consulted by Canada on whether we agreed with the* Nathan E. Stewart *transporting oil through our territories, or with its exemption from having a local pilot. The way Canada handled this situation does not reflect the approach the federal government says it wants to take in developing a nation-to-nation relationship.'"*
>
> ***Chief Slett, Heiltsuk Nation; as quoted in a 2017 article by the Heiltsuk Tribal Council***

Therefore, it is unsurprising that several Prince Rupert Roundtable participants signalled an interest in increasing their communities' participation in marine shipping, including key roles in pilotage. Several suggestions were made regarding methods or policies to increase Indigenous participation, such as enshrining Indigenous representation on the Pilotage Authorities' Boards of Directors. Participants at the Vancouver *Pilotage Act* Review Roundtable held in March 2018, echoed this sentiment, and were supportive of the idea that the Board of Directors should not include either active pilots or active industry members. They also had some concerns about dispute resolution if Indigenous representatives were included on the Board of Directors to ensure that all members are heard. As well, the participants stressed that there should be at least three Indigenous members on the Advisory Committee, if constituted.

Other suggestions included developing sub-regional communication plans with Pilotage Authorities or creating a Canadian pilotage school to recruit and train young Canadians. These suggestions were brought forward with emphasis on the key role that traditional and localized knowledge plays in providing safe and efficient pilotage services. In order to harness this knowledge and to ensure that community concerns are taken into account in marine shipping, it is important that Indigenous people be represented on decision making bodies.

Recommendation 7

I recommend that one position on the Board of Directors of the Pacific Pilotage Authority be reserved for a representative from the Indigenous communities of British Columbia.

While this recommendation would designate one position on the Board of Directors of the Pacific Pilotage Authority for Indigenous communities, this approach could be applied in other pilotage jurisdictions if there is sufficient interest from Indigenous communities.

Given the current realities of Canadian demography, there is merit to the idea of establishing a formal channel of opportunity for younger individuals to pursue careers in marine shipping, especially within Indigenous communities. According a Statistics Canada report on the 2016 Census,[15] Indigenous Canadians represent 4.9% of the total population; a result which is up from 3.8% in 2006, and 2.8% in 1996. From 2006 to 2016, the Indigenous population grew by 42.5%—more than four times the growth rate of the non-Indigenous population over the same period. Among the general population, seniors outnumber children for the first time in Canadian history. Among Indigenous Canadians, however, nearly one-third are 14 years of age or younger, which is more than four times the proportion that are 65 or older. In 2016, the average age within the Aboriginal population was 32.1 years, while that within the non-Aboriginal population was 40.9 years. These results indicate an emerging opportunity to align rapid growth in the Indigenous workforce with the needs of the marine shipping industry, as well as with broader sustainability initiatives such as the Oceans Protection Plan.

Finally, the Government of Canada has made clear its commitment to supporting a renewed relationship with Indigenous Peoples, including a government-to-government relationship with First Nations, Inuit, and Métis peoples in Canada. During the Roundtable discussions, participants highlighted that the concept of reconciliation must be implemented through

15 Statistics Canada. Aboriginal people in Canada: Key results from the 2016 Census. Accessed at [illegible]

concrete actions. With this in mind, it is worth considering other activities that incorporate traditional knowledge and increased Indigenous participation within the scope of marine shipping.

Courtesy of Transport Canada

CHAPTER 5

LABOUR

5.1 Service Delivery Structure of Pilotage

The labour model used to deliver pilotage services in Canada is outlined in section 15 of the *Pilotage Act*.

If a Pilotage Authority hires pilots, these pilots become direct employees of the Crown corporation. If a Pilotage Authority uses contract pilots, it must enter into a service contract with the body corporate, otherwise referred to as a pilot corporation. The decision to be organized as a group of employee pilots or to form an independent pilot corporation is made by the pilots that operate within that region.

The Great Lakes Pilotage Authority and the Atlantic Pilotage Authority use employee pilots, while the Laurentian Pilotage Authority contracts for services with two pilot corporations, and the Pacific Pilotage Authority has both employee pilots and contract pilots that operate exclusively from each other. The Atlantic Pilotage Authority also uses entrepreneurial pilots to provide service in some of its low-volume ports.

TABLE 11: **NUMBER OF PILOTS AND PILOT STRUCTURE USED BY EACH PILOTAGE AUTHORITY**

	Atlantic Pilotage Authority	Laurentian Pilotage Authority	Great Lakes Pilotage Authority	Pacific Pilotage Authority
Employee Pilots	47	0	59	8
Contract or Entrepreneurial Pilots	11	185	0	103
Total*	58	185	59	111

*Includes apprentice pilots

Source: ***Each Pilotage Authority's Annual Report, 2016***

Marine pilotage services operate as a regulated monopoly in Canada and are delivered without the use of competition. Subsection 15(2) of the *Pilotage Act* prohibits employee pilots and contract pilots from providing services in the same areas. The Pilotage Authorities may only hire one group of pilots in each pilotage district, making them the exclusive provider of pilotage services for that area.

The monopoly structure of pilotage services is intended to uphold the safety of the pilotage system by ensuring, among other related factors, that pilots are properly trained and have access to the appropriate tools and resources, and that there is an adequate supply of pilots to serve all vessels in need of services.

However, given that there are no alternative providers of pilotage services, work stoppages can have serious implications on the shipping industry and maritime economy.

Sections 15.1 and 15.2 of the *Pilotage Act*, introduced through the former Bill C-9 in 1998, require pilot corporations to use mediation and final offer selection arbitration to address any issues that remain unresolved with the Pilotage Authority in the negotiation or renewal processes of the service contract. Section 15.3 of the *Pilotage Act* prohibits contract pilots from refusing to work or engaging in work stoppages during a service contract or while it is under negotiation.

Employee pilots are subject to the *Canada Labour Code*, which includes provisions on mediation and arbitration. However, there are no legislative restrictions on employee pilots that prevents them from engaging in work stoppages. The Pilotage Authorities may enter into no-strike agreements with their employee pilots, but these must be individually negotiated and are dependent on the willingness of both parties to agree.

The Legacy of Pilot Corporations

The labour structure detailed in the *Pilotage Act* reflects the reality that pilot corporations were already providing pilotage services before the legislation was enacted in 1972. The Bernier Commission explains the history of pilot corporations in Canada.

Pilot corporations were operating in Quebec prior to Canada's Confederation in 1867. These have evolved into the Corporation des Pilotes du St-Laurent Central Inc. and the Corporation des Pilotes du Bas Saint-Laurent Inc. British Columbia's pilot corporation traces its origins back to the 1920s, and was later incorporated as the British Columbia Coast Pilots Ltd. in 1973. Given the longstanding history of pilot corporations in Canada, the *Pilotage Act* was written in 1972 to reflect the role of these corporations in the delivery of pilotage services.

Labour Model Considerations

Throughout the *Pilotage Act* Review process, stakeholders identified advantages and disadvantages within the current labour structure, often in relation to the real, perceived or potential discrepancies between the employee pilot and contract pilot models. For example, cost implications may be felt by users if regulatory provisions enter service contracts or if final offer selection arbitration leads to more restrictive or cost-prohibitive pilotage services. The remainder of this chapter will address many of these concerns, giving consideration to possible solutions.

5.2 Management and Oversight of Service Delivery

The ability of the Pilotage Authorities to manage and provide direction to their pilots depends on whether they use employee pilots or contract for services with a pilot corporation.

The Pilotage Authorities have direct oversight over their employee pilots. This allows them to provide direction, as appropriate, to these pilots in order to manage the overall delivery of pilotage services in their region. Through direct access to their employee pilots, Pilotage Authorities are able to engage them on a variety of pilotage matters, including advice on future operational changes.

In contrast, the Pilotage Authorities do not have management capabilities with contract pilots, as this role is undertaken by the pilot corporation. This creates a degree of separation between the contract pilots and the Pilotage Authorities.

"Where pilots choose to establish and operate as a pilot corporation, the capacity of a Pilotage Authority to manage and take final decisions on services delivery and pilotage requirements is significantly reduced."

Laurentian Pilotage Authority submission, p. 7-8

This can pose challenges for the Pilotage Authority, especially since the pilot corporations became the sole service providers in the areas in which they operate. The monopoly structure enshrined in the *Pilotage Act* exacerbates any difficulties a Pilotage Authority may experience as a result of being unable to manage a pilot corporation.

The Pilotage Authorities may also encounter difficulties as a result of their inability to exercise influence over contract pilots since they are left with few levers to provide direction or ensure compliance. Their only available avenue is to raise any issues with the pilot corporation, though this may not result in long-term change.

If pilotage operated in a competitive environment, the Pilotage Authority would have the choice to end its contract and enter into negotiations with a different service provider. However, given the way that the pilotage system is structured, there are no alternative service providers available to the Pilotage Authority. The situation may be further complicated if there are poor lines of communication between the Pilotage Authority and pilot corporation.

The Bernier Commission acknowledged that there are differences between using employee pilots and contract pilots, particularly when pilotage is regarded as a public service. This is largely a result of the status and security conferred upon employee pilots, which reduces risks of potential conflicts of interest.[16] Accordingly, the use of employee pilots is recommended by the Bernier Commission.

"Where pilotage is classified as an essential public service, the status of licensed pilots to be that of Crown employees or quasi-employees of the Crown, the former being preferable."

Report of the Royal Commission on Pilotage, Recommendation No. 24, p. 545

Perceptions around Cost

A recurring concern raised during all of the *Pilotage Act* Review Roundtables, as well as in many of the written submissions provided by industry stakeholders, is that pilotage is expensive and much of this cost is related to labour costs.

While Pilotage Authorities report on their total pilot expenses in their annual reports, this figure is often not separated into its different components – such as salaries, fees, benefits, and training – which can be misleading if this figure is used to reflect pilot salaries alone. Salary data collected by Statistics Canada does not isolate for each individual occupation, and so pilots, captains, deck officers, and other related positions are presented under the comprehensive category of "deck officers—water transport." Given the broader concerns around sharing

16 Canada. Report of the Royal Commission on Pilotage, Part I: *General Introduction: Study of Canadian Pilotage Legislation and General Recommendations*. Ottawa: Privy Council's Office, 1968. p. 545. http://publications.gc.ca/collections/collection_1968/publication.html

sensitive information, there is a reasonable expectation of privacy around pilots' salaries. As a result, it is beyond the scope of this report to provide specific salary information for the pilots hired or contracted by the Pilotage Authorities.

This does not diminish the concerns of the shipping industry around pilotage costs or the perception that pilot salaries are high. It was raised in the *Pilotage Act* Review Roundtables in Ottawa and Montreal that the shipping industry was losing its captains to vacant apprentice pilot positions with the Pilotage Authorities. The written submission from the Chamber of Marine Commerce claims that pilots may be making more than double what captains do, with captains earning around $175,000 annually. Stakeholders have claimed that the more lucrative income of pilots is one of the reasons for this switch.

One study commissioned by members of the shipping industry in 2015 indicates that captains engaged in domestic transport in Canada made approximately $16,621 to $17,920 per month.[17] If captains were to work at the same rate year-round, this could potentially amount to a $200,000 annual salary.

The Canadian Coast Guard's rates of pay can also be used to provide a sense of what other top marine professionals earn in Canada. Their most recent collective agreement for ship's officers expired in 2014 but is currently still in effect.

Senior officers (e.g., captains) with the Canadian Coast Guard have an annual salary range of between $69,311 for Class A vessels, to $141,760 for Class G vessels. These figures include adjustments for lay days and any applicable extra responsibility allowances.

Without concrete information comparing the pilots with other mariners, it is not possible to demonstrate the salary difference among these occupations. This would also have to be controlled for other relevant factors, such as the type of piloting conducted, the geographic and environmental conditions of the pilotage areas, duration of trips, etc.

Using information collected through KPMG's 2018 pilotage study on international comparisons, a global perspective on pilots' salaries can also be taken. For example, the Port of London in the United Kingdom uses a port model to deliver pilotage services. These pilots are directly employed by the Port Authority and make approximately £76,000 annually with allowances.

In contrast, both Washington state and the Federal Great Lakes region in the United States use private licensed pilots that operate within a regulated monopoly. Pilots in Puget Sound, Washington were each making almost $375,000 (USD) in 2009, while the average salary in the Federal Great Lakes region was $326,000 (USD) in 2017. The United States Coast Guard has proposed a salary of $319,617 (USD), the new benchmark compensation figure for 2018, in their most recent Notice of Proposed Rulemaking.[18]

However, there are also challenges with comparing international pilots' salaries since pilotage services are often offered through a monopoly structure. Many of the regions reviewed in KPMG's 2018 study deliver pilotage through a regulated monopoly, such as France, Germany,

17 Attwater, in Saint Lawrence Partnership prepared for Canada's Minister of Transport, Infrastructure and Communities, *Canada Marine Act Review: Final Report* (Ottawa: Transport Canada, 2015), 49. Online: www.tc.gc.ca/media/documents/corporate-publications/canada-marine-act-review-final-report.pdf.

18 Coast Guard, Department of Homeland Security, "Great Lakes Pilotage Rates — 2018 Annual Review and Revision to Methodology," *Federal Register* 83, No. 11 (January 18, 2018): 2140. www.federalregister.gov/documents/2018/01/18/2018-00867/great-lakes-pilotage-rates-2018-annual-review-and-revision-to-methodology.

Japan, Korea, Netherlands, and the United States (Federal waterways and several individual states). A monopoly structure naturally leads to a higher salary than what would be offered in a competitive model.

Furthermore, around the world, pilotage is frequently delivered through a pilot organization or body corporate. All of the countries mentioned above, in addition to Australia, Brazil, and Denmark, deliver pilotage services through a pilot association or partnership.[19] Consequently, the exclusivity of the occupation and its services also result in a higher salary than what would be offered in an open market model.

It should be acknowledged that pilotage is a specialized profession with natural barriers to entry. Marine pilots must have many years of seafaring experience, with most applicants having previously held ranks as senior officers or captains. They must also be able to demonstrate significant local knowledge of the area in which they intend to be licensed. It typically takes two to three years for an apprentice pilot to become a licensed pilot, during which time they undertake supervised pilotage training duties on all classes and sizes of vessels. The specific requirements for obtaining a pilot's license are outlined in the *General Pilotage Regulations* and each of the Pilotage Authorities' *Regulations*.

Although definitive statements cannot be made about pilot salaries, it is clear that pilot expenses are the single largest expense for the Pilotage Authorities. KPMG's 2018 study on the governance of the Pilotage Authorities illustrates that between 49 to 82 percent of Pilotage Authorities' core expenses are for pilot fees, salaries, benefits, and training. The lower- to mid-percentage range captures the Pilotage Authorities using only employee pilots and the mid- to high-percentage range captures those using contract pilots.

However, it is important to recognize that employee pilots and contract pilots represent different types of cost. Pilotage Authorities that use employee pilots have higher fixed costs as a percentage of their total expenses. In contrast, Pilotage Authorities that use contract pilots have a much higher variable cost, suggesting that they have greater long-term flexibility. The risks and liabilities related to any future changes to the provision of pilotage are absorbed by the Pilotage Authority when employee pilots are used, whereas this is transferred to the pilot corporations when service contracts are signed.

TABLE 12: **FIXED AND VARIABLE COSTS OF EACH PILOTAGE AUTHORITY AS A PERCENTAGE OF THEIR TOTAL EXPENSES** (2016)

	Atlantic Pilotage Authority	Laurentian Pilotage Authority	Great Lakes Pilotage Authority	Pacific Pilotage Authority
Fixed Costs	75%	14%	65%	15%
Variable Costs	25%	86%	35%	85%

Source: *KPMG, Pilotage Governance Models Assessment, 2018*

Some stakeholders attribute the rising cost of pilotage not just to pilots in general, but to the use of pilot corporations. The primary issue has been the monopoly of services held by these private entities.

19 Note that no information is available regarding the use of pilot associations or partnerships in Korea.

> *"...the fact that the Act creates an* ***"unchecked" legal monopoly in favour of commercial service providers,*** *with shipowners being the only source of financing for this monopoly, has proven to be a very challenging model that has led to escalating costs and service inefficiencies."*
>
> ***Shipping Federation of Canada submission, p. 9; emphasis in original***

The submission from the Shipping Federation of Canada suggests that consideration should be given towards the possibility of converting all contract pilots into employee pilots, noting that pilotage costs appear lower where employee pilots operate and higher where contract pilots are used, which could be interpreted as acceptance of the possibility of higher fees during traffic downturns. It did caution that converting all pilots into employees could increase costs if all pilot salaries are raised to align with the current highest pay scale (i.e., that of the contract pilots) and that safeguards would be needed to prevent this from happening. Notably, however, the submission does not account for the different conditions and types of pilotage that may impact the complexity of pilotage services within each of the Pilotage Authority's districts.

The submission from the Chamber of Marine Commerce echoes similar sentiments, stating that the monopoly of pilot corporations results in higher pilotage costs. They argue that this is in part due to the potential bias of contract pilots, whose advice to the Pilotage Authorities may be obscured by their contracted positions.

> *"...the pilotage authority must rely on corporation pilots whenever their expertise is needed to advise on requirements and standards for safe navigation and the efficient delivery of services on the respective area. However, since pilotage requirements and determining mandatory pilotage areas could impact the pilots' income, there is an inherent conflict of interest."*
>
> ***Chamber of Marine Commerce submission, p. 25***

Concerns around the double monopoly of pilotage in Canada, which privileges the position of private corporations, has frustrated many industry stakeholders. This has led some stakeholders to call for reform to the labour structure of pilotage service delivery.

Considerations for Pilot Conversion

The Pilotage Authorities are a monopoly provider for marine pilotage services in Canada. The *Pilotage Act* does not permit more than one entity from providing pilotage services in each district. As a result, the pilot corporations effectively operate as a "second layer" within this monopoly. This double monopoly may be accompanied by additional challenges and costs for the Pilotage Authorities and pilotage users.

This extra layer should be eliminated so that the Pilotage Authorities directly hire their pilots and, in some limited circumstances, may use entrepreneurial pilots to meet additional pilotage demands (e.g., to service low-volume ports). By only using employee pilots, the Pilotage Authorities would gain full management capabilities over their pilots, effectively removing the second monopoly within the pilotage system held by the pilot corporations.

However, a high-level preliminary analysis of the cost of converting contract pilots into employee pilots – which was prepared in support of the *Pilotage Act* Review and cannot be publicly disclosed due to the confidential information shared by the three pilot corporations for the purposes of this exercise – finds that the cost of this conversion would be significant. This seems to be the case in the context of the public service and the continued use of the Crown corporation model, mainly due to the costs associated with transferring these pilots over to the Public Service Pension Plan.

While an amendment to the *Pilotage Act* to convert all contract pilots into employee pilots may be considered, the preliminary analysis indicates that this is not currently a viable option. In order to make this recommendation, pilot conversion needs to make economic sense.

Furthermore, there will be strong opposition from pilot corporations against any possible conversion. Reluctance is expected given the longstanding organization and operation of pilot corporations in Canada. As a result, if the Government of Canada chooses to proceed with pilot conversion, this would be more easily done on a voluntary basis. This is not likely to occur in the short-term due to the expected reluctance amongst contract pilots towards voluntarily converting.

There are also risks to only relying on employee pilots for the provision of pilotage services, which should be further evaluated and assessed before further action is taken. For example, the Pilotage Authorities that currently use contract pilots will be faced with higher fixed costs if all pilots are converted into employees. They will have to manage the traffic volatility risks that were previously the responsibility of the pilot corporations, potentially effecting their mandate to be financially self-sufficient.

Moreover, employee pilots are legally able to engage in strikes and work stoppages. The delivery of pilotage services may be jeopardized if there is a strike, especially since pilots are difficult to replace. To introduce a no-strike clause, each Pilotage Authority will need to negotiate and enter into agreements with their employee pilots. However, there is no guarantee that the employee pilots will agree to a no-strike clause.

While there is not enough information or support to recommend the conversion of contract pilots into employee pilots, it is evident that there are difficulties when the Pilotage Authorities contract for pilotage services with pilot corporations. There are steps that can be taken to limit these associated challenges. As such, it is proposed that the recommendations detailed under each of the following subsections below be considered.

5.3 Service Provision and Pilot Engagement

Pilots operating within a particular area may choose to work as employees of the Pilotage Authority or form a pilot corporation with which the Pilotage Authority may contract for services.

The Atlantic Pilotage Authority's written submission recommends that the pilots and the Pilotage Authority should come to a mutual agreement on how the pilots should be organized, whereas the Laurentian Pilotage Authority recommends that the Pilotage Authority should make the decision on whether pilots should be employees or part of a corporation.

Subsection 15(2) of the *Pilotage Act* addresses how a Pilotage Authority may contract for pilotage services with a pilot corporation:

> *"...the Authority may contract with that body corporate for the services of licensed pilots and the training of apprentice pilots in the region or part thereof where the contract is to be effective, and* ***the Authority shall not employ pilots or apprentice pilots in the region or part thereof where such a contract is in effect."***
>
> ***Pilotage Act, subsection 15(2); emphasis added***

The use of pilot corporations prohibits the Pilotage Authorities from hiring any employee pilots in the same areas. This permits a legislated monopoly for private pilot corporations, as they become the sole providers of pilotage services in their respective districts of operation. As noted above, preventing the Pilotage Authorities from hiring employee pilots where pilot corporations operate may make the Pilotage Authority's management of pilotage services inflexible. There are no alternatives for service delivery once a contract has been put into place. Subsection 15(3) allows other pilots within the district to also join the pilot corporation, thereby leaving the pilot corporation as the Pilotage Authority's only source for obtaining pilots.

Some stakeholders have raised concerns over the inability of the Pilotage Authorities to hire both employee and contract pilots in the same districts. During the *Pilotage Act* Review Roundtable in Montreal, it was raised that the Pilotage Authorities which exclusively rely on pilot corporations can only obtain opinions and advice on pilotage matters from contract pilots, potentially resulting in a conflict of interest. The possibility of conflict of interest in having contract pilots make decisions on operational requirements was also noted at the *Pilotage Act* Review Roundtable in Vancouver, given the potential impact on their income and job security.

By introducing flexibility when engaging with pilots, Pilotage Authorities would be able to develop in-house expertise and support their mandate to remain financially self-sufficient.

If applied in the current context, the Pilotage Authorities, within a single district, would be able to hire employee pilots and, if needed, to contract with a pilot corporation. Contracting with more than one pilot corporation within the same district would not be permitted in order to prevent competition between the two corporations or potential conflicts of interest. Further, any one pilot corporation could only provide service in its district. Under circumstances where a Pilotage Authority only hires employee pilots and does not contract with any pilot corporations, it may use entrepreneurial pilots on an as-needed basis (e.g., to service low-volume ports). In these cases, entrepreneurial pilots would not be providing services in the same districts as employees.

Permitting employee pilots to work in the same districts as a pilot corporation does not introduce competition since users of the pilotage system in Canada will still receive their services through the Pilotage Authorities. The delivery of pilotage services will not be opened up to the free-market, and shippers will not be able to pick and choose between the two pilot groups. Pilotage Authorities that use both employee and contract pilots will be responsible for developing a structured and sophisticated "tour de rôle" that will ensure the safety of the

pilotage system and fairness for the pilots that are providing these services. Each Pilotage Authority would also be required to harmonize safety standards across the different pilot groups.

The concept of hiring both employee and contract pilots in the same districts is fairly controversial. There is no consensus across the submissions received by the Pilotage Authorities about whether a mixed model should be introduced. This may be attributed to the fact that each Pilotage Authority has a unique labour structure in their region.

Stakeholders also raised concerns in the March *Pilotage Act* Review Roundtable in Vancouver that using a mixed labour model could lead to unfair management practices. The primary concern was that Pilotage Authorities may use the second group of pilots as leverage to force pilots to perform pilotage services that they deem unsafe.

As is currently the case, the Pilotage Authorities are expected to respect the professional judgement and expertise of the pilots. In a mixed labour model, pilots would be able to refuse to perform assignments that they deem to be unsafe in much the same way as they presently make these determinations.

The existing recourse mechanisms that are available in employee jurisdictions would continue to be available to pilots (i.e., occupational health and safety and/or grievance procedures). Any potential infringement to the safety of the marine pilotage system would be formally addressed through the appropriate channels.

These concerns are further mitigated by the development of a formal Code of Conduct or Code of Ethics for marine pilots (as discussed in Chapter 3 on *Purpose and Principles*). An established Code of Conduct would help to achieve a balance between the pilots' informed discretion and their professional accountabilities, thereby limiting the frequency in which a Pilotage Authority may call into a question a pilot's determination.

The submission from the Laurentian Pilotage Authority suggests that the inflexibility of the *Pilotage Act* to engage employee pilots if a contract is in effect with a pilot corporation prevents the development of in-house expertise, which can be used to provide advice and recommendations to the Pilotage Authority. These pilots may also speak to or represent pilotage issues in ruling objections or judicial reviews that may arise through appeal and objection processions.

> *"It is essential for the [Laurentian Pilotage Authority] to have access to objective in-house pilotage expertise in order to fulfill its mandate, including with respect to the development of credible and effective regulations, procedures and policies to ensure a proper balance between navigation safety and the efficient delivery of pilotage services. Whether related to questions of double pilotage, safe draught levels or restrictions to night-time departures, access to objective in-house pilotage expertise is critically important for the [Laurentian Pilotage Authority] to ensure good decision-making and the protection of public interest."*
>
> ***Laurentian Pilotage Authority submission, p. 13***

The concept of in-house expertise was also noted in the submission from the Atlantic Pilotage Authority, which details how employee pilots share information and provide advice to the Pilotage Authority.

> *"The employee pilots partner with the management of the [Atlantic Pilotage] Authority to support stakeholders in developing new business and infrastructure in the region... This in-house marine expertise is available to the Authority through the practise of having five district chairs, elected by their peers, who represent their local areas and consult regularly with the management team of the Authority."*
>
> ***Atlantic Pilotage Authority submission, p. 4***

Submissions provided by a number of industry stakeholders, such as the Chamber of Marine Commerce, the Armateurs du Saint-Laurent, the Shipping Federation of Canada, and Groupes Desgagnes Inc. and Fednav Limited, were supportive of allowing employee and contract pilots to operate in the same area.

In contrast, pilots raised concerns in the March *Pilotage Act* Review Roundtable in Montreal that using a mixed labour model could erode the pilot corporations' business model, especially if there was a large increase of employee pilots in districts where, currently, only pilot corporations operate.

Submissions received from all three pilot corporations – the British Columbia Coast Pilots Ltd., the Corporation des Pilotes du St-Laurent Central Inc., and the Corporation des Pilotes du Bas Saint-Laurent Inc. – were strongly opposed to having in-house employee pilots. Therefore, while some stakeholders view subsection 15(2) of the *Pilotage Act* to be too restrictive, others feel that the status quo works well.

Recommendation 8

I recommend that the *Pilotage Act* be amended so that the Pilotage Authorities are able to use the workforce configuration that best meets their needs. The Pilotage Authorities should be free to manage, through an effective dispatching system, hiring their own employees, any contracting with a pilot corporation, and use of entrepreneurial pilots in any given district.

Each Pilotage Authority should be able to use the labour model that is congruent to its business and operational needs. To prevent the introduction of competition into the mixed labour model, and given the management and oversight challenges noted in Section 5.2 of this report, the creation of any new pilot corporations in Canada is not encouraged.

5.4 Final Offer Selection Arbitration

In the 1990s, pilot corporations agreed not to withdraw their services during contract disputes and would, instead, work with a negotiation process based on mediation and final offer selection arbitration. This came into force when the *Pilotage Act* was amended in 1998. Conditions surrounding the renewal of contracts, as well as the use of mediation and arbitration are outlined in Sections 15.1 and 15.2 of the *Pilotage Act*.

If a pilot corporation and the Pilotage Authority cannot agree on a new service contract, the two parties must jointly select a mediator and, if needed, an arbitrator. If mediation fails to resolve all issues under negotiation, the outstanding issues are then referred to the arbitrator. The arbitrator's role is to choose one of the two offers in its entirety.

As it is currently structured, the arbitrator selects what they view to be the most reasonable offer presented, without consideration for other information beyond the positions held on the outstanding issues. The offers are treated as two individual packages, which are selected on an all-or-nothing basis.[20]

While the arbitration model was introduced to resolve disputes and prevent work stoppages, challenges have arisen with the use of final offer selection arbitration. The primary concerns, some of which were raised at the *Pilotage Act* Review Roundtables in Halifax and Toronto, are centred on what information the arbitrator must take into consideration when making a selection, and that the offer must be selected in its entirety.

The submission from the Laurentian Pilotage Authority details some of the challenges it has faced in using the final offer selection process. It highlights an arbitration case from 2002 between the Laurentian Pilotage Authority and the Corporation des Pilotes du St-Laurent Central Inc. The arbitrator selected the offer presented by the pilot corporation, which, among its other components, included an eight percent increase of the tariff received by the Corporation des Pilotes du St-Laurent Central Inc., retroactive to the last year of the previous service contract.[21] The Laurentian Pilotage Authority attempted to quash the award in Federal Court, stating that the increase would be contrary to public order due to the financial impact on the shipping industry. The Laurentian Pilotage Authority was ultimately unsuccessful in this attempt and the Federal Court determined that the Pilotage Authority must meet its contractual obligations.[22]

In 2005, the Laurentian Pilotage Authority requested to raise its tariffs to meet these additional costs. However, the Canadian Shipowners Association, the Shipping Federation of Canada, and the Corporation des Pilotes du St-Laurent Central Inc. filed objections to the tariff increase with the Canadian Transportation Agency. After its investigation into the objections, the Canadian Transportation Agency concluded that the tariff increase was prejudicial to public interests and that it should not be approved.[23]

20 Marion Matthews, "Final Offer Selection: Making It Work," *Labour Arbitration Yearbook, 1996-1997*, Lancaster House, Toronto, 1996, page 375.

21 Transport Canada, *Spirit of Cooperation Called for in Laurentian Pilotage Region: News Release*, 2006, http://www.tc.gc.ca/mediaroom/releases/nat/2006/06-h147e.htm.

22 Pilotes du St-Laurent Central Inc. v. Laurentian Pilotage Authority [2003] FC 1473, http://canlii.ca/t/1hwsc.

23 Transport Canada, *Spirit of Cooperation Called for in Laurentian Pilotage Region: News Release*, 2006, http://www.tc.gc.ca/mediaroom/releases/nat/2006/06-h147e.htm.

By this time, the Laurentian Pilotage Authority had already accumulated a deficit of over $10 million and the Canadian Transportation Agency decision further jeopardized the Pilotage Authority's financial self-sufficiency.[24] To prevent the Crown corporation from greater financial hardship and possible bankruptcy, the Minister of Transport asked the Governor in Council to intervene in the case. On June 15, 2006, the Governor in Council rescinded the Canadian Transportation Agency's decision and the Laurentian Pilotage Authority was permitted to raise its tariffs.

This example emphasizes the challenges that can arise with the use of the final offer selection process when the offers must be selected as a whole and the arbitrator is not required to reflect on other relevant information pertaining to the Pilotage Authority and its operations or the pilot corporations. In this case, if the arbitrator was required to give consideration to the financial self-sufficiency of the Laurentian Pilotage Authority or its long-term viability, a different offer may have been selected for being deemed more "reasonable."

In a more recent example, the Laurentian Pilotage Authority requested a judicial review of an arbitration award from February 2016 involving another arbitrator's selection of the Corporation des Pilotes du St-Laurent Central Inc.'s final offer. The concerns raised by the Laurentian Pilotage Authority focus on whether two aspects of the pilot corporation's offer – one regarding the relief of a pilot by a ship's master and the other regarding notices for night time departures – are *ultra vires*, or beyond the legal power or authority of the pilot corporation.[25] The judicial review concluded that the first of the two areas of concern was *ultra vires*, and that the case would need to be returned to the arbitrator with each party's amended offers. This ruling is currently under appeal with the Federal Court of Appeal.

The written submission of the Shipping Federation of Canada states that changes to the night time departures requirements through the service contract negotiation process, which were not viewed to be *ultra vires* by the judicial review, encompass a regulatory safety issue that should only be addressed through the appropriate regulatory processes, as discussed in greater detail below. Circumventing the regulatory process diminishes the rigour of the overall system.

Given the current structure of final offer selection arbitration in the *Pilotage Act*, there is a strong possibility that similar challenges will arise during future contract negotiations. The Laurentian Pilotage Authority, the Great Lakes Pilotage Authority, and the Shipping Federation of Canada recommended within their respective written submissions that the arbitrator should give consideration to the mandate of the Pilotage Authorities, as well as other relevant aspects of their long-term planning.

In its own submission, the Corporation des Pilotes du St-Laurent Central Inc. suggested that it would be open to having the arbitrator select elements from both of the offers, as opposed to having one selected in its entirety. In contrast, the British Columbia Coast Pilots Ltd.'s submission maintained that it is supportive of the current arbitration model and does not wish to see it changed.

24 Canadian Transportation Agency, *Decision No. 274-W-2007*, 2007, https://www.otc-cta.gc.ca/eng/publication/274-w-2007

25 Laurentian Pilotage Authority v. Corporation des pilotes du Saint Laurent central Inc. [2016] FC 1413, http://canlii.ca/t/gvdm

Recommendation 9

I recommend that the final offer selection process be amended such that the arbitrator must consider the purpose and principles of the *Pilotage Act* (as amended in Recommendation 1), when making arbitration rulings.

5.5 Service Contract Overlap with Regulations

Embedded within the outcomes of final offer selection arbitration – but which can also occur outside of the use of dispute resolution processes – is the issue where a pilot corporation's service contract may overlap with the Pilotage Authority's regulatory provisions, often in relation to safety (see Chapter 6 of this report on the *Safety Framework*). This concern was raised in the *Pilotage Act* Review Roundtables in Montreal and Toronto, with some stakeholders expressing interest in having all regulatory provisions removed from existing and future service contracts.

This was highlighted in the submission from the Chamber of Shipping of British Columbia, which suggested that references to the activities and functions under the responsibility of the Pilotage Authorities should be taken out of all service contracts. Similarly, the Chamber of Marine Commerce's submission recommended that service contracts should not include clauses that address navigation and safety requirements.

Similarly, in the Laurentian Pilotage Authority's written submission, it recommended that all matters covered by the regulation-making powers and responsibilities of the Pilotage Authorities should not be present in pilot corporation's service contracts, and arbitrators involved in the dispute resolution process should not be able to select final offers that overlap with regulatory provisions.

One of the major concerns about this overlap is that the service contracts may have requirements that are not aligned with what is detailed in the Pilotage Authorities' *Regulations*. While the *Regulations* are published documents, the service contracts are not publicly available, making it difficult for the shipping industry to know what requirements they must adhere to in advance of their need for pilotage services.

An example discussed at a number of the *Pilotage Act* Review Roundtables was the discrepancy between the requirements and conditions for double pilotage as written in the *Regulations* and those which may be detailed in the service contracts between the pilot corporations and the Pilotage Authority. This has a direct impact on the cost incurred by the shipping industry, since the requirement of double pilotage increases the cost of pilotage services given the need for the additional pilot.

Furthermore, service contract clauses can be viewed as a way for pilot corporations to introduce new requirements or stipulations without having the Pilotage Authority go through the necessary channels for introducing a regulatory amendment. The regulatory process features stakeholder consultations and opportunities for public feedback through publication in the *Canada Gazette*, while service contracts are negotiated in private.

In 2002, the Canadian Transportation Agency agreed that service contracts should not include or circumvent the regulatory provisions of the Pilotage Authorities. They recommended that:

"The Authority should conduct a thorough review of all contract provisions to ensure that all clauses relating to regulatory powers are removed in accordance with the Ministerial directive [of 1999]. The inclusion of such clauses in the service contracts is an improper delegation of the Authority's powers to the pilot corporations. In doing so, the Authority has limited itself as to actions or changes that it can make through regulatory amendments, which it is mandated to do under the Pilotage Act."

Canadian Transportation Agency, Decision No. 645-W-2002

In their written submission, the Laurentian Pilotage Authority emphasized the need to remove regulatory provisions from service contracts with pilot corporations. It explains that if the Pilotage Authority would like to remove these clauses from the service contracts, there are currently few tools available to achieve this, aside from directly negotiating with the pilot corporations on these points.

"To comply with the regulation-making process and ensure that the public authority has the final say on applicable pilotage requirements, the Act should be amended to indicate that matters covered under the regulation-making power, and practices and procedures promulgated by Pilotage Authorities may not be included or amended through service contracts with pilot corporations or modified by arbitration decision."

Laurentian Pilotage Authority submission, p. 10

The United States Coast Guard has overcome this problem through the Code of Federal Regulations. To implement working rules proposed by pilot corporations operating in the Federal Great Lakes region, the approval of the Director of the United States Coast Guard is required since there are no Pilotage Authorities.[26] Instead, the United States Coast Guard deals directly with the pilot corporations, and as a result, the Director has a significant influence over the operational conditions of pilotage, with the power to refuse or approve any changes.

There is nothing in Canada's *Pilotage Act* that prevents or prohibits certain subjects from being included in a service contract. As a result, any removal of regulatory provisions from a service contract ahead of a legislative amendment would have to be done through negotiations between the Pilotage Authority and the pilot corporation on a voluntary basis.

The courts have maintained that Pilotage Authorities, through the *Pilotage Act*, can regulate and enter into contracts with pilot corporations concurrently, and that "[t]he Act imposes no limit on the conditions which an Authority and a representative of the pilots may negotiate."[27] Without amendments to the *Pilotage Act* which reflect these concerns, it may be difficult to remove these contentious elements from service contracts through the regular negotiation and dispute resolution processes.

26 Coast Guard (Great Lakes Pilotage, Department of Homeland Security, *Code of Federal Regulations*, Title 46, Section 401.220 (2010). http://www.gpoaccess.gov/cfr/index.html

27 Pilots du Saint-Laurent Central Inc. v. Laurentian Pilotage Authority [2000] FCJ No. www.canlii.org/en/ca/fca/

Recommendation 10

I recommend that all safety regulatory provisions be removed from the service contracts between the Pilotage Authorities and pilot corporations within one year.

5.6 Transparency

As noted earlier, the management and conditions of employee pilots and contract pilots are based on two separate labour models. The public-private distinction also results in different levels of transparency and public reporting between the Pilotage Authorities and pilot corporations.

The Pilotage Authorities report on pilot fees, and employee salaries and benefits in their annual reports and corporate plan summaries. For employee pilots, additional information, sought through the Pilotage Authority, may be requested through the *Financial Administration Act*, *Access to Information Act*, and *Privacy Act*, or during public audits, such as those conducted by the Office of the Auditor General. The collective agreements signed between employee pilots and the Pilotage Authorities are also made publicly available.

In contrast, pilot corporations operate as fully private corporations and are not subject to the same transparency or accountability obligations as employee pilots. Beyond the line items provided in the Pilotage Authorities' reports, there is limited access to other information regarding the finances of pilot corporations. They are not subject to government reporting requirements and their service contracts are not made public.

Consequently, private, for-profit corporations are responsible for providing a compulsory public service without the corresponding transparency and accountability requirements that would typically be expected of a monopoly service provider. This has drawn concern since pilot corporations, as legally mandated by the *Pilotage Act*, are the only pilotage service providers in the districts in which they operate.

It has also been raised that the current system does not align with the Government of Canada's commitment to openness and transparency, since little information is available regarding the activities of pilot corporations.[28] While private corporations are not subject to the same reporting requirements as government entities, operating within a federally-regulated monopoly results in higher standards for transparency and greater scrutiny from its users and the general public.

The need for pilot corporations to be more transparent was discussed at each of the *Pilotage Act* Review Roundtables. Stakeholders expressed that they feel there is an absence of checks and balances in the delivery of pilotage services without the disclosure of financial statements and service contracts, especially as some users have vocalized their concerns about rising pilotage costs without any subsequent improvements or changes to the pilotage system. Many stakeholders emphasized that public reporting should be required when private corporations operate as regulated monopolies.

28 Canada, Office of the Auditor General, 2015, [illegible]

A number of stakeholders' written submissions indicated a strong interest in making the pilot corporations adhere to legislated transparency requirements. For example, the Laurentian Pilotage Authority's submission recommends that oversight, accountability, and transparency requirements for pilot corporations be introduced into the *Pilotage Act*. Submissions from the Shipping Federation of Canada, Chamber of Marine Commerce, Armateurs du Saint-Laurent, Cruise Lines International Association, and Groupes Desgagnes Inc. and Fednav Limited underscored the need for pilot corporations to make their audited financial statements and service contracts public.

Issues around the transparency of pilot organizations have been addressed in other jurisdictions. For example, in the United States, requirements for transparency have been placed on pilot associations operating in waterways regulated by the United States Coast Guard, such as in the Federal Great Lakes region. The Code of Federal Regulations states:

> *"A pilotage association must report each expense item for which it seeks reimbursement through the charging of pilotage rates, and make supporting information available to the Director. The Director must recognize the item as both necessary for providing pilotage service, and reasonable as to its amount when compared to similar expenses paid by others in the maritime or other comparable industry, or when compared to Internal Revenue Service guidelines. The association will be given an opportunity to contest any preliminary determination that a reported item should not be recognized."*
>
> ***U.S. Coast Guard, Title 46 Code of Federal Regulations, para. 404.2***

According to KPMG's 2018 pilotage study on international comparisons, countries that deliver pilotage services through licensed pilots that operate within a regulated monopoly – such as France, Germany, Japan, Korea, Netherlands, and parts of the United States – are required to submit financial statements to their respective regulating authorities. In some cases the pilot organizations are also required to submit revenue and cost projections on an annual basis.

Finally, the Bernier Commission of 1968 recommended that pilot corporations be made subject to reporting requirements, but this only needed to be provided to the Pilotage Authority and not to the general public. The Bernier Commission advised that the Pilotage Authority be responsible for approving the pilot corporation's by-laws and that the pilot corporations must submit their financial statements annually, subject to further audit by the Pilotage Authority. Given these recommendations, the concept of requiring a private corporation to transparency obligations is not new.

Recommendation 11

I recommend that the *Pilotage Act* be amended such that all pilot corporations, as monopoly service providers, are subject to greater levels of transparency and accountability. Financial statements and service contracts should be made publicly available, and pilot corporations should be made subject to financial audits and Access to Information requests.

CHAPTER 6

SAFETY FRAMEWORK

A competitive marine transportation system helps Canada to meet its economic goals and provides vital services to remote and Northern communities. Public interest in marine safety has increased significantly over the past several years as a result of the proposals to move increasing volumes of petroleum and other products by ship. Pilots play a key role in these marine movements and marine pilotage is an important element of any safety regime.

Pilots board a vessel to navigate it through coastal, port, and inland waterways using their experience and superior local knowledge. Canadian pilots carry out over 50,000 assignments per year, often navigating ships with either precious or potentially hazardous cargo. Canadian pilots provide service 24 hours a day, 7 days a week, all year long in all types of weather. They routinely face workplace challenges that are unique to the shipping profession. Canada's Pilotage Authorities and pilots are internationally respected for operating, maintaining, and administering a safe pilotage service demonstrated by an exemplary safety record in the order of 99.9% incident-free assignments.

Safe navigation in Canadian waters is the overarching objective of Canada's pilotage system and while safety remains a clear priority, there is a need to modernize the pilotage system while allowing continuous improvement in safety.

This chapter examines the pilotage safety system including the regulatory framework and practices, the enforcement regime, the risk management approach, the use of new technology, compulsory pilotage exemptions, medical requirements, and pilotage in the Arctic.

6.1 Regulatory Framework

As mentioned earlier in this report, the *Pilotage Act* provides the legislative framework for the provision of pilotage services in Canada. The four Pilotage Authorities were created under the Act to operate and maintain safe and efficient pilotage services. The *Pilotage Act* sets out the parameters for the regulatory framework for pilotage safety, comprised of the *General Pilotage Regulations* administered by the federal government and separate regulations administered by each of the four Pilotage Authorities.

The *General Pilotage Regulations* are applicable across the entire pilotage system. They primarily govern the medical fitness requirements and the navigation qualifications for applicants, pilots, and pilotage certification, as well as forms of licences and hearing procedures.

Each Pilotage Authority exercises jurisdiction over the waters within the geographic boundaries specified in the *Pilotage Act* for each pilotage region, and has the authority to make regulations covering the following:

- Establishment of compulsory pilotage areas;
- Determination of ships subject to the compulsory pilotage areas;
- Conditions under which compulsory pilotage may be waived;

- Notification required to be given by a ship for pilotage services; and
- Qualifications required for and issuing of a pilot licence and pilotage certificates and waivers.

Each of the Pilotage Authorities' regulations have similar content and consistent definitions but there are some significant differences and inconsistencies in their application and requirements. Some of the more significant differences between the Pilotage Authorities' regulatory frameworks and practices include:

Compulsory Pilotage – While all Pilotage Authorities use a similar manner to describe the boundaries of a compulsory pilotage area, each Pilotage Authority has established regulations prescribing the sizes and types of ships subject to compulsory pilotage areas. These requirements differ between Pilotage Authorities and even between districts within the Laurentian Pilotage Authority. One of the more significant deviations is the size (tonnage and/or length) criteria for Canadian Registered ships.

TABLE 13: **CANADIAN REGISTERED VESSELS SUBJECT TO COMPULSORY PILOTAGE**

Atlantic Pilotage Authority	Laurentian Pilotage Authority	Great Lakes Pilotage Authority	Pacific Pilotage Authority
Ships greater than 1500 tonnes	District 1 &1.1 - ships greater than 70 meters and greater than 2400 tonnes District 2 – Ships greater than 80 meters and 3300 tonnes	Ships greater than 1500 tonnes	Ships greater than 350 tonnes

Another example is the different criteria used to determine ships not subject to compulsory pilotage. While all the Pilotage Authorities exempt Canadian government ships, fishing vessels, ferries on a regularly scheduled route, and small tugs, there are differences in the exclusion of vessels of war, grandfathered Canadian ships, and US government ships less than 10,000 tonnes.

All Pilotage Authorities are consistent in providing waivers of compulsory pilotage in similar conditions such as when a vessel is engaged in a rescue, in distress, or seeking refuge. However, some Pilotage Authorities apply additional waivers that are unique to their jurisdiction. Some examples include waivers for a person on board requiring medical evacuation, and circumstances where a pilot is unable to board due to weather or ice without undue delay to normal passage.

Notices for Pilots – The notification requirements to provide a pilot for departures and movages vary by Pilotage Authority and location.

Pilot Certificates – All Pilotage Authorities have the regulatory authority to issue certificates and apply similar criteria, but some Pilotage Authorities have specific conditions or endorsements for ship size and endorsed areas.

Pilot Licences – All Pilotage Authorities issue licences but the criteria for the different classes of licences can differ either by pilotage area or ship size. Only the Laurentian Pilotage Authority sets a maximum limit on the number of licences by district.

Experience – All Pilotage Authorities require a pilot applicant to have the experience detailed in the *General Pilotage Regulations* and each provides additional experience criteria based on local knowledge, number of trips or training courses. All but the Pacific Pilotage Authority require a licence holder to have a specified minimum number of trips and/or dockings to maintain their qualifications, but these requirements differ among the other three Pilotage Authorities.

Medical Fitness – The medical fitness standard for Canadian pilots is addressed in the *General Pilotage Regulations*, while the process for assessing the medical fitness of pilots is the responsibility of the individual Pilotage Authorities. In all of the Pilotage Authorities, pilots are required to have a valid marine medical certificate issued by Transport Canada as required under the *Marine Personnel Regulations*. However, because the current system for the assessment of medical fitness is not specific to marine pilots, the process for assessing the medical fitness of pilots varies widely among the Pilotage Authorities.

Service Contracts – Contractual pilots, organized as commercial pilot corporations, enter into contracts with some Pilotage Authorities for the provision of pilotage services. These contracts include navigation and safety requirements that sometimes overlap with the Pilotage Authority's regulatory provisions. Additionally, the contract negotiation process does not include the involvement of users as required by the federal regulatory process.

During the *Pilotage Act* Review Roundtables and in submissions, many stakeholders noted the above differences and inconsistencies in the regulatory framework and practices. Some perceived that these differences and inconsistencies reflect a regulatory system that is not objective, equitable, impartial, nor fair. It is important to users that the entire Canadian pilotage system be consistent and predictable and this cannot happen if there are differences between Pilotage Authorities and if the negotiated contracts and regulations differ.

There was strong support for a pilotage system that would be regulated with national consistency while still considering regional interests. However, there was no consensus on how best to make this happen. Some stakeholders preferred that the Pilotage Authorities assume responsibility to regulate all aspects of pilotage safety but were governed by national standards developed by an independent body.

"In this context, we recommend that action be taken to address any perceived/existing shortfalls within the Act, so that Pilotage Authorities can in fact regulate all aspects of safety. The Act must also be amended to ensure the primacy of the Pilotage Act and its regulations over pilotage services contracts, in all cases"

Shipping Federation of Canada submission, p. 14

Many others preferred that Transport Canada assume the regulatory authority for pilotage safety.

> *"Create an independent regulatory authority to provide greater objectivity, oversight, and enforcement of pilotage services, i.e. TC [Transport Canada]. At present, both functions are held by the pilotage authorities which can make objectivity a challenge."*
>
> ***Canadian Steel Producers Association submission, p. 2***

The 2016 *Canada Transportation Act* Review Panel recommended that the four Pilotage Authorities be integrated into one National Pilotage Authority, in part to provide a harmonized approach. While this recommendation would have resulted in a common set of Pilotage Authority regulations and addressed many of the inconsistencies, the assessment of governance options outlined in Chapter 4 of this Review concluded that the best governance model at this point in time is to merge the Great Lakes Pilotage Authority with the Laurentian Pilotage Authority, thereby operating three separate Pilotage Authorities. A nationally consistent regulatory framework that takes into account local, regional, and national interests remains an important objective. Therefore, an alternative approach is required to achieve national regulatory consistency.

Many international jurisdictions have chosen to separate the development of safety regulations from the service delivery functions of the pilotage industry. The development, and often enforcement, of the safety regulations pertaining to pilotage generally resides with the governing body, which in Canada's case would be Transport Canada.

Transport Canada currently develops a significant number of regulations and as such has the requisite resident expertise. The Department is an active member of the Government of Canada's regulatory community and would be well-positioned to develop timely, effective, and responsive regulations and to exercise oversight on all aspects of the pilotage industry. Pilotage Authorities would be able to focus their expertise and resources on the safe and efficient administration and delivery of pilotage services.

Separating the regulation function from service delivery can also be important to prevent abuse of power. For example, when the same organization both regulates and provides services, there is an inherent incentive to expand compulsory pilot requirements to increase revenue notwithstanding any additional safety requirement.

Recommendation 12

I recommend that the *Pilotage Act* be amended to provide the Minister of Transport, with the approval of the Governor in Council, the authority to make all regulations pertaining to pilotage safety. The Act must also clearly state that the *Pilotage Act* and its regulations have primacy over pilotage services contracts.

While a common, national set of Pilotage Authority regulations is the preferred approach to achieve harmonization, there may still be unforeseen situations where a regional peculiarity needs to be addressed. In order to respond to specific regional issues, the Pilotage Authorities could retain limited regulatory authority, or regional issues could be reviewed on a case by case basis with the national regulations tailored accordingly. To ensure consistency and efficiency, it would be preferable to include a regional-specific provision in the national regulations.

Subsequent to the *Pilotage Act* amendment providing the Minister of Transport the authority for regulations pertaining to pilotage safety, the development and implementation of new, national regulations will take several years. In the interim, the Pilotage Authorities will need to retain the authority to regulate. There are two general approaches to implement this transfer. First, the Minister of Transport could be provided with the authority to delegate the regulation-making authority to the Pilotage Authorities and rescind this delegation once Transport Canada has implemented the national regulations. Second, the coming into force of the amended provision(s) in the *Pilotage Act* could be deferred until the national regulations are finalized.

With these changes, the Pilotage Authorities will be able to focus on the safe and efficient service delivery elements of their mandate. In this role they will need to be strengthened and provided with the authority to develop, adopt and enforce binding practices and procedures related to safe and efficient service delivery. These authorities could be modelled on those provided to Canada Port Authorities under section 56 of the *Canada Marine Act*.

Recommendation 13

I recommend that the *Pilotage Act* be amended to provide the Pilotage Authorities with the authority to adopt and enforce binding practices and procedures related to the safe and efficient delivery of pilotage services.

A key to any successful regulatory process is the working relationship among the partners in the process. It is imperative that the industry be engaged by Transport Canada throughout the entire regulatory process. In addition to ongoing dialogue with the individual Pilotage Authorities, an important first step would be discussion at the Advisory Committee outlined in Chapter 4. The Advisory Committee would discuss the issue that requires addressing, alternative tools and means to address it, and the parameters to be included in a regulation if deemed the best approach. Finally, a separate working group should be established by Transport Canada as part of the Canadian Maritime Advisory Council to engage in the development of regulations.

An effective regulatory program can only be determined by assessing the results through key performance indicators. As previously noted, the Pilotage Authorities have an exemplary safety record of a 99.9% incident-free rate of piloted vessels which has been sustained over many years, despite the increasing number and size of vessels using the waterways. However, it is difficult to rely exclusively on a single number to draw firm conclusions about the overall state of pilotage safety. Some of the more glaring measurement shortfalls include:

- Lack of consistency in measuring and reporting;
- Insufficient granularity. For example, the measurement of the difference in safety performance between vessels with pilots and those with certificate holders;
- Lack of ability to measure the contribution of pilotage to the overall marine safety system. (The Canadian Marine Pilots Association funded a Cost/Benefit Analysis study in 2017 that placed a quantitative value on the benefit of pilotage expenditures compared directly to its cost);
- Broader definition of pilotage incident than most other jurisdictions leading to an inability to compare safety performance; and
- Unavailable outcomes of the specific regulatory requirements and their contribution to the overall safety performance.

These are but an example of areas where additional key performance indicators would help assess the safety performance of the pilotage system and support a culture of continuous improvement. Public interest in marine safety and environmental protection is at a high level in Canada and making key performance indicators publicly available would help communicate the safe performance of the marine transportation system.

Recommendation 14

I recommend that Transport Canada, as the independent regulator, establish a comprehensive set of key safety performance indicators.

Shifting responsibility for the development and oversight of safety regulations from the Pilotage Authorities to Transport Canada will require that Transport Canada strengthens its departmental capacity. The additional responsibilities for developing regulations, monitoring, and compliance and enforcement will likely be delegated to the Marine Safety and Security organization and its inspectorate. Resources and skills will be needed to effectively engage stakeholders, enhance data collection and analysis, and conduct the appropriate oversight.

Recommendation 15

I recommend that the Government provide the necessary resources to develop the pilotage safety regulatory and oversight capacity in Transport Canada.

6.2 Enforcement

There are two types of enforcement under the *Pilotage Act*. The first is categorized as enforcement actions related to the administration of the *Pilotage Act* and includes licence suspension, revocation, holding of hearings, etc. This administrative enforcement would remain the responsibility of the Pilotage Authorities, as they would provide the licenses as part of providing the service. As noted in the previous section, the Pilotage Authorities should be strengthened with the authority to adopt and enforce binding practices and procedures for these

activities. The second is enforcement for contraventions of the *Pilotage Act*. As recommended in section 6.1 of this report, Transport Canada would assume responsibility for the development and oversight of the safety regulations pertaining to the pilotage sector. As these regulations would impose conditions on ships, pilots, and Pilotage Authorities, clear enforcement authority for the Minister of Transport must be established under the *Pilotage Act* to address these areas.

The *Pilotage Act* would also include a provision to authorize the delegation of enforcement powers. The approach currently used in Transport Canada statutes varies.

TABLE 14: **MINISTERIAL ENFORCEMENT POWERS IN OTHER TRANSPORTATION ACTS**

Canada Shipping Act, 2001	Marine Safety inspectors are authorized to perform duties on behalf of the Minister of Transport. Inspectors are authorized to carry out inspections to ensure compliance and take appropriate actions to determine any non-compliance.
Navigation Protection Act	The Minister may designate persons or classes of persons for the purpose of administration and enforcement.
Railway Safety Act	The Minister may designate a railway safety inspector and determine the restrictions and conditions under which the inspector may exercise power.
Marine Transportation Security Act	The Minister may designate persons or classes of persons qualified to act as security inspectors for the purpose of the Act.
Bill C-64 (*Wrecked, Abandoned or Hazardous Vessels Act*)	The Minister may designate persons or classes of persons as enforcement officers for the purpose of administration and enforcement of the Act.

Effective oversight of regulated entities is a key part of Transport Canada's mandate and mission. The objective to reduce the risk to life, property, and the environment from marine shipping requires a robust, fair, and nationally consistent enforcement program. Establishing the regulations is only the initial step. Taking appropriate action to encourage, support, and compel compliance with the regulations is equally significant.

Transport Canada Marine Safety inspectors would be the logical option to exercise enforcement of the *Pilotage Act* provisions. Marine Safety Inspectors are best positioned to undertake compliance monitoring and enforcement activities with the requisite training. The *Pilotage Act* should provide the Minister authority to designate persons or a class of persons as enforcement officers and designate all Marine Safety Inspectors.

Recomendation 16

I recommend that the *Pilotage Act* be amended to:

a) Include a compliance scheme outlining authorities required to verify compliance; and

b) Provide the Minister of Transport with the appropriate powers to enforce the provisions of the Act and the authority to delegate the enforcement of these provisions, all or in part, to designated persons or classes of persons. The Minister of Transport should designate Marine Safety Inspectors as a class of persons and delegate them enforcement powers once they have had the requisite training.

The *Pilotage Act* and the current regulations contain few prohibitions. The most important are section 25 and section 47:

> Section 25 "Except as provided in the regulations, no person shall have the conduct of a ship within a compulsory pilotage area unless the person is a licensed pilot or a regular member of the complement of the ship who is the holder of a pilotage certificate for that area."
>
> Section 47 "Except where an Authority waives compulsory pilotage, the owner, master or person in charge of a ship subject to compulsory pilotage that proceeds through a compulsory pilotage area not under the conduct of a licensed pilot or the holder of a pilotage certificate is guilty of an offence and liable on a summary conviction to a fine not exceeding five thousand dollars."

Offences and Punishment for breaches of the *Pilotage Act* and regulations are itemized in sections 47 to 51 of the Act. Breaches can earn penalties up to $5,000 for proceeding without a pilot through an area where pilotage is compulsory and up to $10,000 per day for refusing to provide pilotage services while a contract for services is in effect or being negotiated. As well, the *Pilotage Act* provides for administrative sanctioning of pilot licences and pilotage certificates by a Pilotage Authority for a prescribed set of causes. There is recourse to the Minister of Transport when a licence or certificate has been refused or sanctioned.

The question is whether or not to update the current enforcement provisions under the *Pilotage Act*.

The fines for sections 25 and 47 are only levied on summary conviction. The commencement of legal proceedings is a costly venture and a deterrent for a Pilotage Authority to prosecute any but the most grievous cases as the cost of pursuing a summary offence often exceeds the amount of the fine. Another important consideration is whether the amount of fine provides a sufficient deterrent to non-compliance.

"The most important of these is Section 47 which deals with a vessel proceeding through pilotage waters without a pilot. The problem with this section is the level of the fine imposed and the fact that it is only on summary conviction. This means that you must commence legal proceedings against the vessel who contravened the Act, which is a costly venture in itself, particularly when the maximum penalty is a mere $5,000. When you consider that a vessel requiring two pilots to transit the Inside Passage will likely generate a pilotage invoice of $10,000, the amount of the fine for contravention is actually less than the cost of hiring the pilots. The fine is not a deterrent for non-compliance."

Pacific Pilotage Authority submission, p. 10

Often, legislation empowers the courts to suspend or cancel a licence, as an additional penalty to fines or imprisonment when a licence holder is convicted of an offense related to the licence. Under the *Pilotage Act*, the courts have no power to impose a licence/certificate suspension or cancellation or to penalize a section 25 offense.

An alternative approach to summary convictions is a ticketing scheme. There are two distinct types of ticket-based regimes for dealing with minor violations of regulatory requirements: ticketing under the *Contraventions Act* and an Administrative Monetary Penalty system under individual statutes. Both systems distinguish criminal offences from regulatory offences, reduce the burden on the court system, and lift the burden of trials from parties. Both systems also retain the summary conviction process as an option for more serious offences.

There are benefits and limitations to both scheme. However, given that there are some provinces that do not have an agreement in place to apply the *Contraventions Act*, the penalty ceiling is limited to $1,000, and it is less comprehensive than an Administrative Monetary Penalty scheme, Transport Canada has developed most of its statutes with an Administrative Monetary Penalty scheme. Breaches of the *Pilotage Act* are not frequent but the offences are often serious and the Administrative Monetary Penalty model is more appropriate and should be adopted for a modernized *Pilotage Act*.

The fines currently imposed under the *Pilotage Act* are significantly lower than the penalties available under Administrative Monetary Penalty regimes in other departmental regulatory statutes that deal with marine transportation:

TABLE 15: **MAXIMUM PENALTIES IN TRANSPORT CANADA STATUTES**

Canada Shipping Act, 2001	Up to $25,000
Canada Transportation Act	Up to $5,000 for individuals, $25,000 for companies
Navigation Protection Act	Up to $5,000 for individuals, $40,000 for companies
Marine Transportation Security Act	Up to $25,000
Canada Marine Act	Up to $5,000 for individuals, $25,000 for companies
Bill C-64 (*Wrecked, Abandoned or Hazardous Vessels Act*)	Up to $50,000 for individuals, $250,000 for corporations/vessels for violations that are deemed serious. Up to $5,000 for individuals and $25,000 for corporations/vessels for all other violations

While always retaining the discretion to prosecute, most of the Transport Canada statutes have a maximum administrative penalty no lower than $5,000 for an individual and $25,000 for a company. Bill C-64 (*Wrecked, Abandoned or Hazardous Vessels Act*) includes higher amounts for violations that are deemed more serious.

An Administrative Monetary Penalty regime would have to be built from the bottom up for the *Pilotage Act* and include the following elements:

- A regulation making authority to prescribe offenses as violations and maximum penalties (or ranges) per violation;
- Higher penalties for any violation that is deemed serious and based on the severity of the violation;
- Lower penalties of $5,000 for an individual and $25,000 for all other violations consistent with the most recent Transport Canada marine legislation;
- The option to enter into an assurance of compliance agreement with the Crown where there is no dispute of the facts of the violation. Such agreements are subject to specific terms and conditions and provide an opportunity for a person to rectify their non-compliance without being subject to an Administrative Monetary Penalty. Failure to comply by the terms and conditions can lead to a penalty greater than the Administrative Monetary Penalty that would have been imposed;
- A discretion to proceed by way of summary conviction or Administrative Monetary Penalty; and
- A review and appeal mechanism that could include an internal review under the Minister of Transport or involving the Transportation Appeal Tribunal of Canada.

Recommendation 17

I recommend that the *Pilotage Act* enforcement provisions be amended to include an Administrative Monetary Penalty scheme that imposes higher penalties for serious violations and distinguishes between fines for individuals and those applicable to corporations/vessels.

6.3 Risk Management

Risk management can be succinctly defined as the identification, evaluation, and prioritization of hazards and risks followed by the development of a plan for mitigation measures to address the hazards and risks. Resources are not unlimited and need to be allocated according to the level of risk. To be effective, a risk management process needs to be objective, transparent, proactive, adaptable, and employed consistently.

Risk management is relatively new to the pilotage sector in Canada and is evolving. In 1999, the Canadian Transportation Agency conducted a review of pilotage and submitted a report entitled *Review of Pilotage Issues* to the Minister of Transport. The report noted that the Pilotage Authorities considered a series of factors in establishing compulsory pilotage areas, size and type of vessels subject to compulsory pilotage, the requirement for double pilotage, and the use of waivers. However, the Pilotage Authorities had not used a deliberate and discriminate process and the report recommended that each Pilotage Authority conduct risk-based assessments.

In response, Transport Canada and the four Pilotage Authorities developed a comprehensive risk-based methodology in 2001. This *Pilotage Risk Management Methodology* was used by the Pilotage Authorities for various purposes but proved to be very costly and complex. Consequently, the Pilotage Risk Management Methodology was updated and streamlined in 2008.

The risk assessments governed by the Pilotage Risk Management Methodology are the responsibility of the Pilotage Authority but the project leader is generally an external consultant, given the limited capacity of the Pilotage Authorities. However, senior Pilotage Authority staff generally participate as a member of the risk team that is established to provide expert input and advice to the project leader. Other members of the risk team include primary stakeholders supplemented with specialized expertise if necessary. The Chief Executive Officer is responsible for ensuring that the Pilotage Risk Management Methodology has been followed and that the analysis, reporting, and documentation is appropriately completed. The Pilotage Authority Board of Directors approves any significant project, receives the final report, and is the final decision-maker.

Stakeholders voiced many concerns on the methods currently used under the Pilotage Risk Management Methodology:

- The process is long, cumbersome, and very costly;
- There is often insufficient information available to make informed decisions;

- There is potential for a conflict of interest as the results of the exercise could have impacts on the revenues of pilots or on the operating costs of shipowners and they are key participants in the exercise;
- The process does not adequately take into consideration new technology and innovations in navigation;
- Any mitigating measure must be within the scope of the Pilotage Authority's mandate which normally means the requirement to have a pilot on board rather than a broader scale of mitigating measures that would enhance safe navigation;
- The focus is solely on safety and does not provide a balance with traffic fluidity and efficient navigation; and
- There is no independent process to resolve any impasse on the results of a risk assessment.

For example:

> *"There is a difference of opinion and a lack of consensus regarding the methodology used by the Pilotage Authorities. There is already an apparent conflict of interest from the outset, given that the results of the exercise could have a monetary impact on pilots' income. Implicit in the PRMM [Pilotage Risk Management Methodology] is the presence of a pilot on board, whereas ship owners are talking about an analysis of navigation-related risks."*
>
> ***Groupe Desgagnés Inc. and Fednav Ltd. submission, p. 49-50; translated from French***

One of the more positive aspects noted about the process is that it is generally recognized as inclusive and transparent as all stakeholders, including Indigenous communities.

> *"The Pilotage Risk Management Methodology is designed to gather input from all stakeholders, and to then expertly evaluate risk and benefit. It is transparent and independent, as such, it fosters sound decision making that the public can have confidence in."*
>
> ***The Canadian Merchant Service Guild submission, p. 2***

The current Pilotage Risk Management Methodology is not inherently objective. There is no process in place to prioritize the conduct of risk assessments on compulsory pilotage areas, leaving the Pilotage Authorities the latitude to decide the priority based on criteria other than risk. The role that pilots play in the process allows them to exert unwarranted pressure on the decision-making process. The risk assessment program should be led by an independent body. It is imperative that the individual processes be led by a knowledgeable mariner to ensure acceptance by stakeholders.

Risk assessments in the transportation sector tend to be event-based such as a change in operations or an incident rather than conducted on a regular, ongoing basis. The practice of undertaking a risk assessment whenever a material change occurs is sound public policy.

However, changes in traffic and technology can occur rapidly, and risk assessments should be conducted regularly rather than reserved solely for when an event has occurred or major changes are being introduced.

A significant number of compulsory pilotage areas have never been subject to a risk assessment and run the risk of being outdated. The 2016 *Canada Transportation Act* Review recommended that compulsory pilotage areas, circumstances, and processes be reviewed every three to five years minimum, in consultation with users and the international pilotage community, taking into account new technologies and best practices and including a re-assessment of navigation safety risks. While this recommendation is solid, a more efficient and effective process would be to develop a two-tiered system comprising of a high-level scan and a detailed risk assessment. The risk scan would be applied to assess whether a compulsory pilotage area had experienced significant developments or changes prior that would merit initiating a comprehensive risk assessment.

In addition to a process that can adapt to changes in vessel traffic and new technology, Canada also needs a process that can provide national consistency in the approach while taking into account differences that exist between regions in regards to vessel traffic, cargo, as well as environmental and socio-economic sensitivities. The *Pilotage Act* should provide the Minister of Transport with the authority to regulate the conduct of risk assessments, which would ensure national consistency in approach and recognize the uniqueness of each region. This would further remove Pilotage Authorities and pilots from potential conflict of interest situations when assessing and mitigating risk. It would also allow Transport Canada to independently resolve any impasse on the outcomes of the risk assessment pending the development/amendment of any regulation.

Recommendation 18

I recommend that the *Pilotage Act* be amended to provide the Minister of Transport with the authority to regulate the conduct of pilotage risk assessments.

As the regulator, Transport Canada should establish the standards, guidelines, and regulations for the conduct of risk scans and assessments in consultation with the industry. The risk assessments need to be conducted on a scientific basis using modern tools such as modelling, consider all aspects of risk (i.e., assess navigational risk, not just pilotage risk), and consider technological advances such as electronic charting, Global Positioning Systems, Automatic Identification Systems, and other innovations.

The mitigating measures to address the hazards and risks would need to extend beyond the provision of pilots and come from a broader range of navigation solutions. A simple name change to Navigation Risk Assessment Methodology would set the tone for these changes. Given the requirement to have the delivery of pilotage services financially self-sufficient and considering the conduct of risk assessments is a core business activity, the Pilotage Authorities should continue to lead and fund the scans and assessments.

Canada is investing $1.5 billion in the Oceans Protection Plan to protect Canada's coasts and waterways and to help Canada achieve a world-leading marine safety system. Risk scans and assessments for pilotage need to be integrated with the multiple initiatives underway under the Oceans Protection Plan. First, given the many transformative changes that could affect pilotage in a given area, it will be important to apply the scan to assess all current compulsory areas to ensure that they remain valid. Second, the conduct of Navigation Risk Assessments for compulsory pilotage areas should be integrated with other marine navigation assessments being developed and conducted under the Oceans Protection Plan such as development of regional response plans and the Technical Review Process of Marine Terminal Systems and Transhipment Sites.

Recommendation 19

I recommend that Transport Canada, in consultation with the industry, establish the methodology, standards, guidelines, and regulations for the conduct of pilotage risk assessments, including an impasse resolution mechanism. The risk assessments need to consider all navigational aspects of risk as well as technological advances and should be titled Navigation Risk Assessment Methodology.

As Transport Canada would have an increased role in the development of standards, guidelines, and regulations for the conduct of Navigation Risk Assessments, they will require the requisite skills and resources. This requirement should be assessed in the context of capacity being developed under the Oceans Protection Plan and the increased role to develop safety regulatory and oversight capacity for pilotage.

6.4 Technology

Technology has been used extensively throughout the marine industry to improve navigation and advance safety. As early as 40 years ago, the navigation equipment on a ship consisted primarily of a radar, gyro-compass, magnetic compass, and a paper chart. Modern navigation equipment on most of today's vessels is much more sophisticated and can support safer operating conditions, increased efficiency and decreased costs:

Global Navigation Satellite Systems – Satellite based positioning systems allow ship navigators to continually know where they are anywhere on the globe.

Electronic Navigation Charts – These charts first appeared on the bridge of ships in the 1970's. Moving from paper to electronic charts has greatly increased efficiency by eliminating the use of multiple paper charts over the course of a voyage.

Automatic Identification Systems – These systems are designed to automatically provide real time information about a ship relative to other ships and the coast. The system will display ships in the vicinity including their name, course, speed, and destination.

Draught information system – These systems use electronic charts, real time water level information, and vessel calculations to provide the clearance between the bottom of the vessel and the bottom of the channel.

Integration of information and display – the integration of the bridge systems facilitate the collection, exchange, presentation, and analysis of marine information aboard and ashore to determine safe routing and acceptable speed.

These advances should have had a profound impact on the requirements for pilotage services, yet it appears that little has changed since the *Pilotage Act* was enacted in 1972. The 2016 *Canada Transportation Act* Review noted the lack of adaptation of new technology in the pilotage sector.

> *"Pilots are essential to the safe operation of international vessels, ports, and marine corridors, but the governance of pilotage has not changed fundamentally since 1972, in spite of advances in technology. Canada has not fully taken advantage of these advances to improve the efficiency and reduce overall costs the way some peer countries (such as Norway and Denmark) have done. The Pilotage Authorities acknowledge that technology, including remote piloting of vessels and automated navigation systems, reduce the requirements to have pilots available at all times and in all circumstances."*
>
> ***Canada Transportation Act Review Report, p. 223***

Modern technology provides mariners with better tools and training to support voyage planning, execution, and monitoring but the consideration and adaptation of this technology in the determination of pilotage requirements appears to have been particularly restrictive.

Going forward, the future operating environment will be profoundly impacted by many significant technology advancements and innovations that are currently underway. The marine transportation safety framework and the role of pilotage within this framework will need to adapt to this rapidly evolving environment.

The International Maritime Organization is working on an e-navigation strategy. International Maritime Organization defines e-navigation as the "harmonized collection, integration, exchange, presentation and analysis of marine information on board and ashore by electronic means to enhance berth to berth navigation and related services for safety and security at sea and protection of the marine environment." The Implementation Plan is expected to be completed in 2021. Once completed, the harmonized information will allow industry to start designing applicable products and solutions. The International Maritime Organization formal safety assessment determined that e-navigation could reduce the risk of accidents.

The technology needed to make remote-controlled, autonomous, and unmanned ships a reality exists today. Safety and cost savings are the principle drivers advancing this technology. Human error is a significant part of all accidents at sea, and replacing human control with reliable technology has the potential to increase safety. Cost savings include not only wages but reduced crew facility and support costs. There are, however, barriers to advancement that need to be overcome including the development of appropriate regulatory and legal frameworks. It is expected that the move to fully autonomous vessels will be in a stepped approach starting with small specialized cargo vessels for coastal and local traffic and gradually expand to wider operational areas and larger ships.

Shore-based (remote) pilotage refers to having a ship piloted with the assistance of a licensed pilot located in an on-shore control facility instead of on the ship's bridge. It has been considered and/or tested in places such as Sweden, Denmark, Netherlands, and Portugal in a variety of scenarios from a back-up solution during bad weather (when boarding a pilot is not possible) through to regular use. This service delivery mode has been under consideration for about six or seven years and for various reasons does not appear to be advancing. It is offered in a number of European Union countries such as Belgium, Denmark, and the Netherlands, as well as New Zealand, but in practice its use is limited to exceptional circumstances such as bad weather or for reasons of safety, when the pilot is unable to board a vessel.

> *"The Pilotage Act must consider a pilotage system that includes shore-based pilotage. The emergence of new technology and changes envisioned under the Oceans Protection Plan provide an opportunity to modernize pilotage, increase efficiencies and establish best practices for pilotage across Canada. Additional aids to navigation, improved charts and coastal surveillance would support the evolution of shore-based pilots, that will likely require a different skill set than required for existing pilots."*
>
> ***Chamber of Shipping of British Columbia submission, p. 10***

Some important gains have been made with the introduction of Portable Pilotage Units by the pilots and Pilotage Authorities. A Portable Pilotage Unit is a laptop computer or tablet that the pilot brings on board the ship to assist with navigation in confined waters and berthing or departure manoeuvers. The Portable Pilotage Unit is loaded with electronic maps and is connected to a portable satellite positioning system such as the Global Positioning System and makes it possible for the pilot to have real time information.

As an integral part of the marine safety regime, it is important that the pilotage regime be more open and flexible to the introduction of modern vessel traffic management approaches. Stakeholders are looking for greater use of technology as a cost reduction measure and existing and emerging technology must be a key factor in the determination of pilotage requirements.

> *"Make better use of technology to enhance safety, improve efficiency, and reduce costs of pilotages services. For example, with today's technology on all vessels, including dual GPS units with electronic charts, plus draft information systems to monitor under keel clearances, pilots are not needed for all legs of a St. Lawrence/inter-lake journey."*
>
> ***Canadian Steel Producers Association submission, p. 2***

One particular pilotage requirement that should be assessed in the light of new technology is double pilotage. A reduction in these requirements and restrictions on night-time and winter navigation could be possible given recent developments.

A key component of effective bridge resource management during a pilotage assignment is the exchange of information between the pilot and the bridge management team. This exchange of information needs to include making the Pilotage Authority's voyage plans available to the ship's master. Not all the Pilotage Authorities currently follow this practice which would allow the master to follow the progression of the vessel according to the voyage plan as well as the practices being used by the pilot to navigate the vessel. The modern navigation equipment on a ship today is sophisticated and would permit the integration of the electronic voyage plan into most ship systems.

In addition to enhancing the ability to follow the progress of the ship, the sharing of the voyage plans would provide the bridge management team with additional support and experience in voyage planning and could lead to more masters and navigation officers qualifying for pilotage certification.

While emerging technology needs to be a key factor in the determination of pilotage requirements in the future, it must be done in a measured and practical manner. First, there needs to be assurances that the training of those responsible for the operation of any new equipment keeps pace with the technological development. Second, the use of technology in the training of pilots has limitations that need to be considered. For example, replacing the practical hours of training with simulator training needs to properly consider the need for pilots to be able to utilize non-visual cues (sounds, weather, and traffic patterns). Third, caution must be applied not to develop an overreliance on technology and ensure appropriate emphasis is placed on the benefits of having a mariner on board with in-depth knowledge of local conditions and who can use visual and non-visual clues to safely guide the vessel.

"In the cruise industry, there is arguably now an overreliance on technology and not enough emphasis placed on common seamanship practices such as looking out the window. I have observed this first hand on a number of occasions and was told by a senior cruise ship VP who at one stage was very opposed to pilots, that he would not dream of doing the Inside Passage without pilots anymore, as in his words his young officers were becoming techno geeks and unable to function without all the technology."

Pacific Pilotage Authority submission, p. 14

Recommendation 20

I recommend that the *Pilotage Act* be amended to:

a) Establish an objective that Pilotage Authorities must optimize the use of new technologies; and,

b) Provide the minister of Transport with the authority to require the Pilotage Authorities to publish their voyage plans and that the Minister of Transport exercise this authority.

Recommendation 21

I recommend that the Navigation Risk Assessment Methodology include a requirement that all available technologies must be considered in the determination of pilotage requirements.

6.5 Exemptions

Each Pilotage Authority exercises jurisdiction over the waters within the geographical boundaries specified in the *Pilotage Act*. Section 20(a) authorizes each Pilotage Authority to make regulations establishing compulsory pilotage areas within the Pilotage Authority's geographical boundaries. The Bernier Commission provided two primary reasons for imposing compulsory pilotage:

1. *A maritime casualty would seriously disrupt navigation to the marked disadvantage of the national economy; or*
2. *Safe, speedy transits and movements which must be effected in the national interest cannot be achieved unless vessels are navigated by mariners with adequate local knowledge and skill.*

Bernier's rationale for imposing compulsory pilotage remains sound. However, as addressed earlier in this chapter, compulsory pilotage areas have not changed since 1972 and they need to be reviewed to take into account new technologies and significant developments or changes using a Navigation Risk Assessment Methodology.

A pilot is not part of the ship's crew and embarks the ship temporarily to manoeuvre in a port, or to conduct the ship from one place to another in a compulsory pilotage area. A pilot is issued a licence that entitles him or her to be entrusted with the responsibility of navigating a ship within a specified area. A licence can be viewed as a guarantee to the public that the licensee possesses the necessary standard of technical, physical, and moral qualifications to undertake this responsibility.

The *General Pilotage Regulations* contain certain pilot licencing and certification requirements applicable to all regions. Each Pilotage Authority regulation requires licence holders to meet these minimum requirements and also establishes additional requirements and classifications that differ for each Pilotage Authority. The Pilotage Authorities also set the examination requirements and process to certify that an applicant meets the requirements. As noted earlier in this chapter, there is strong support for a pilotage system that is regulated with national consistency. The regulatory requirements for pilot licencing need to be reviewed in this context to ensure maximum consistency among the regions and to justify any regional differences.

A system of compulsory pilotage areas requiring the use of a licenced pilot(s) is in place to ensure maximum safety of navigation. Only vessels which are most unlikely to become a safety risk in the circumstances prevailing in a given area should be granted an exemption. For any other vessel, the exemption should be based on the competencies of the master or officer to navigate through compulsory pilotage areas. The exemption of ships, the issuance of waivers, and pilot certification are considered as the three key components of the scheme of exemptions.

Exemption of Ships

Under paragraph 20(1)(b) of the *Pilotage Act*, each Pilotage Authority has established regulations prescribing the ships or classes of ships subject to pilotage within compulsory pilotage areas. The sizes and tonnages vary substantially from Pilotage Authority to Pilotage Authority, and even between districts within the Laurentian Pilotage Authority. Additionally, the Pilotage Authorities use different criteria to determine ships not subject to compulsory pilotage. The exemptions applicable to a ship should be nationally consistent, and any unique regional exemption should be reviewed on a case-by-case basis to ensure its validity.

Waivers

Under paragraph 20(1)(c) of the *Pilotage Act*, each Pilotage Authority can make regulations prescribing the circumstances under which compulsory pilotage can be waived. All Pilotage Authorities grant waivers under the following circumstances:

- The ship has to enter or leave the compulsory pilotage areas to embark or disembark their pilot;
- The ship is in distress;
- A ship is engaged in rescue operations;

- A ship enters a compulsory area seeking refuge; or
- A licenced pilot is not available and additional conditions are met.

While the Pilotage Authorities are consistent in providing waivers in the above circumstances, some allow additional waivers that are unique to their jurisdiction. For example, the Atlantic Pilotage Authority may waive compulsory pilotage in respect of a ship for a period of up to one year when the ship is needed for ongoing work such as dredging, laying pipelines, or construction. The Pacific Pilotage Authority may waive compulsory pilotage if a person on board requires medical evacuation and in respect of a ship under 10,000 GRT if all persons in charge of the deck watch hold the appropriate master or mate certificate and have previously served a certain number of days in the region.

One regional-specific waiver that merits examination is on the West Coast. Subsection 22(2) of the *Pilotage Act* stipulates that to qualify for a licence or pilotage certificate, the candidate must be a Canadian citizen or a permanent resident within the *Immigration and Refugee Protection Act*. The West Coast of Canada experiences significant tug-barge traffic on the Seattle-Alaska run. While these vessels are often operated by masters that have the experience and knowledge required to qualify for a pilotage certificate, they are prevented from doing so by the citizenship restrictions in the *Pilotage Act*. As a work around solution, the Pacific Pilotage Authority issues waivers to these vessels, subject to specific conditions dictated by a Standard of Care. While this solution may respect the safety and efficiency objectives and spirit of the *Pilotage Act*, it has no legal basis, is inconsistent with the intent of waivers, creates regional inconsistencies, and presents concerns for Indigenous communities and stakeholders which need to be resolved.

The preferred approach would be to restrict eligibility for a Canadian pilotage certificate to Canadians, permanent residents, and United States nationals. However, this approach would need to be studied further to determine whether there is any impact on any existing Canadian statutes or agreements. Alternatively, it is worthwhile considering whether the certification process could be expanded to all foreign mariners.

The assessment of this approach and subsequent amendments to the *Pilotage Act* will take some time. In the interim, the Pacific Pilotage Authority waiver program should continue but be reviewed in consultation with Indigenous communities and stakeholders.

Recommendation 22

I recommend that the Minister of Transport pursue an amendment to subsection 22(2) of the *Pilotage Act* to extend eligibility to all foreign masters and navigation officers for a pilotage certificate and subsequently terminate the Pacific Pilotage Authority waiver program and replace it with pilotage certification. In the interim, the Pacific Pilotage Authority should retain and review the current waiver program in consultation with Transport Canada, Indigenous communities and stakeholders.

There is no clear justification for regional-specific waivers. The establishment of compulsory pilotage areas is to ensure safe navigation. As such, waivers should only be used in exceptional circumstances rather than to derive economic benefit from avoiding compulsory pilotage.

Therefore, the circumstances for granting waivers should not be extensive and should be nationally consistent. The current common circumstances are deemed appropriate. The circumstances behind each regionally-unique waiver should be examined to determine whether it should be retained, removed, or continued on a national basis.

Pilotage Certification

Most jurisdictions allow qualified masters and officers who qualify, irrespective of their nationality or country of registry, to obtain a pilotage certificate and to navigate through compulsory pilot zones. Generally, a pilotage certificate holder must have a master's licence or certificate, medical certification, a certain level of experience, and must pass an exam. In addition to requirements that must be met, many jurisdictions have developed circumstances under which a pilotage certificate may or may not be granted. These include limiting the geographic area to which the certificate applies, the exclusion of vessels carrying dangerous goods, and the size of the vessel. One element that varies greatly among jurisdictions is whether a certificate is issued for a specific vessel or multiple vessels.

In Canada, the *Pilotage Act* provides the statutory right for any master or officer who possesses the qualifications to be granted a pilotage certificate. The *General Pilotage Regulations* stipulate the minimum qualifications that are applicable to all regions. Some Pilotage Authorities have specific conditions or endorsements based on ship zone and endorsed areas. The regulatory requirements for pilot certification need to be reviewed to ensure maximum national consistency among the regions and to rationalize any regional differences.

While the majority of stakeholders agreed with the need to standardize ship exemptions, waivers and pilotage certification, the need to have an effective national pilotage certification program was overwhelmingly the most important area for exemption reform. The inconsistent application of pilot certificates can be highlighted by the number of active certificates that have been issued by each Pilotage Authority:

Atlantic Pilotage Authority – 52

Laurentian Pilotage Authority – 2

Great Lakes Pilotage Authority – 318

Pacific Pilotage Authority – 0

Many vessels make frequent voyages through the same region, and the master and officers often possess equivalent knowledge and skills of a licenced pilot. In addition to standardizing the certification program to ensure national consistency, there is a need to review the current criteria and examination processes to ensure they are not overly stringent and that there are sufficient opportunities for qualified masters and officers.

"In support of greater flexibility in managing pilotage requirements for vessels and in conjunction with advanced technology in navigational equipment, a standardized and improved certification program administered by Transport Canada should be implemented that facilitates and promotes the training and certification of a company's masters and navigational officers to plot their vessel."

Chamber of Marine Commerce submission, p. 6

Some stakeholders also proposed to expand pilotage certification so that masters and officers who hold a pilot certificate employed by a company be allowed to have the conduct of any vessel within that company's fleet operating in the particular compulsory area. The economic benefits of this proposal are evident as this would provide shipowners with greater flexibility in the deployment of their certified officers among their fleet to meet operational needs. It would also help address any pilot shortages and resulting delays. While many jurisdictions issue a pilotage certificate for multiple ships, the application is usually restricted to a class of ships or similar vessels rather than an entire fleet. Many shipowners operate non-homogenous fleets and providing a certificate that would cover a fleet with significant differences between vessels could compromise safety.

Some stakeholders expressed concern that a certificate valid for a class of ships would be equivalent to creating another group of pilots that could compete with licensed pilots and should not be allowed. The intention is not to provide competition through parallel pilotage. Pilotage certificate holders would be restricted to the conduct of ships within their company of employment and would not be allowed to establish a separate company nor conduct the vessels of another company and would therefore not constitute a competitive situation. The certificate holder would have his or her name on the certificate along with the company name and class of vessels for which it is authorized.

An important role for Transport Canada will be to facilitate and promote an appropriate pilotage certification training and evaluation program. The Great Lakes Pilotage Authority pilotage certification program has been touted as a model to replicate by shipowners. The Great Lakes Pilotage Authority put in place a temporary pilotage exemption system for ships in 1972. The exemption was based on shipping companies declaring their masters and officers met the requirements set out in the *Great Lakes Pilotage Regulations*. Following a 2008 Auditor General Special Examination that recommended the Pilotage Authority implement a more effective mechanism, the exemption system was converted to a pilotage certification program in 2012. This pilotage certification program provides an efficient service with a proven safety record and includes a Great Lakes Pilotage Authority approved training and evaluation program.

As part of its regulatory oversight function, Transport Canada will need to ensure monitoring and compliance with pilotage certificate requirements. As this will take several years to achieve, in the interim the Pilotage Authorities must continue to improve and strengthen their monitoring of the pilotage certificate program. They need to be constantly aware of when a vessel is under the control of a pilot or a pilotage certificate holder in compulsory pilotage zones. The Pilotage Authority's monitoring program will need to comprise two elements: monitoring

the validity of pilotage certificates to ensure certificate holders maintain their qualifications, and monitoring vessel transits to ensure the ship is under the conduct of a valid certificate holder when the service of a pilot was not requested.

Ensuring that monitoring occurs on a frequent basis cannot be overstated. Frequent monitoring ensures that all vessel transits are under the conduct of an appropriately qualified individual and is a key mitigation tool for any safety risks. In the 2018 Special Examination of the Great Lakes Pilotage Authority, the Office of the Auditor General noted:

> *"Overall, we found a significant deficiency in the Corporation's monitoring of the transits of Canadian ships subject to compulsory pilotage in the Great Lakes region, because it could not justify whether the monitoring it performed was effective to mitigate the safety risks."*
>
> ***2018 Special Examination of the Great Lakes Pilotage Authority, p. 13***

It will also be important to ensure that pilotage certificate holders respect the same hours of work as pilots and that effective fatigue management practices apply to maintain safety levels. In some cases, such as the Seattle to Alaska route or transiting the St. Lawrence River, this condition may require the engagement of multiple pilotage certificate holders over the course of the voyage. Another issue raised was whether pilotage certificate holders in the Laurentian Pilotage region should have to be able to converse in both English and French. One view was that as technology moves forward there will be less reliance on verbal communications and this requirement is inconsistent with international conventions to which Canada is party. Conversely, arguments were made for communications in both English and French as communications with officers of Coast Guard's communication services, ferry and tugboat captains, boaters and other pilots are predominantly in French and fluid comprehension could be a safety issue. While there is no demonstrated benefit to changing the current bilingual requirement, this situation should be monitored.

Improvements to the pilotage certification program will require investments by the Pilotage Authorities. Chapter 7, of this report, recommends the Pilotage Authorities impose fees for certificates and these additional costs should be recovered through this process.

Transference of the pilotage safety regulatory-making powers to Transport Canada would allow the department to create a nationally consistent compulsory pilotage exemption scheme taking into account regional particularities. Transport Canada would provide independent and unbiased oversight and eliminate the potential influence that could be exerted by pilot corporations in the current system. It will be important that the regulations supporting the exemption scheme do not compromise safety and do not create a competitive pilotage situation. The establishment of a scheme of exemptions applicable to compulsory pilotage areas should be subject to a Navigation Risk Assessment Methodology.

Recommendation 23

I recommend that Transport Canada implement and administer a standardized exemption scheme and stipulate the requirements in a new national regulation. Transport Canada should facilitate and promote a national pilotage certification program for the training and evaluation of ship masters and navigational officers without compromising safety or creating a competitive pilotage situation. Where appropriate, the pilotage certification should extend to cover a class of ship in the same company. In the short term, the Laurentian Pilotage Authority should take measures to increase the number of certificate holders in the region.

6.6 Medical Requirements

Section 52 of the *Pilotage Act* authorizes the Governor in Council to make regulations respecting the health requirements that an applicant for a pilot licence or pilotage certificate must meet and the medical examinations and frequency that a licenced pilot or holder of a pilotage certificate must undergo to demonstrate they continue to meet the health requirements. Part I of the *General Pilotage Regulations* addresses the medical fitness standard for Canadian pilots while the process for assessing the medical fitness of pilots is established in each Pilotage Authority's regulations.

The *General Pilotage Regulations* requires every applicant or holder to be examined by a designated physician, lists some general disabilities to look for and stipulates the physician take into account the medical fitness standards set out in the *Marine Personnel Regulations.* These medical fitness standards are based on guidelines on the medical examinations of seafarers established by the International Labour Organization and the International Marine Organization.

The *Marine Personnel Regulations* directs a marine medical examiner, the designated physician, to perform medical examinations and advise the Minister of Transport of the seafarer's fitness. The department then validates the examination results and issues a marine medical certificate.

While stakeholders did not raise any issue with the current medical requirements, a research study[29] commissioned for the *Pilotage Act* Review commented that the assessment of medical fitness is for seafarers in general and is not specific to marine pilots. The study notes that the job demands and working conditions of marine pilots differ from that of a regular seafarer. One notable example is the physical strength, coordination, and balance needed to board/disembark a vessel from/to a pilot launch under sometimes adverse weather and sea conditions. Under the current direction provided to a marine medical examiner to assess seafarers, they may not appreciate these differences. Transport Canada in consultation with the Pilotage Authorities should review the demands of a pilot's job and working conditions and determine if additional requirements are required to assess their medical fitness. If so, the *General Pilotage Regulations* should be amended and clear direction provided to marine medical examiners.

29 Canadian and International standards used to evaluate the medical fitness of pilots – Kenneth Corbet MD FRCPC

Recommendation 24

I recommend that Transport Canada, in consultation with the Pilotage Authorities, review the demands of a pilot job and working conditions and amend the general fitness requirements in the *General Pilotage Regulations*.

While the medical fitness standards are consistent across all the Pilotage Authorities, the process for assessing the medical fitness of pilots is the responsibility of the individual Pilotage Authorities. As outlined in Table 16, the process for assessing the medical fitness of pilots varies widely among the Pilotage Authorities.

TABLE 16: **PROCESS FOR ASSESSING PILOT MEDICAL FITNESS**

Atlantic Pilotage Authority	The Atlantic Pilotage Authority has a contract with the Atlantic Offshore Medical Services for medical fitness assessments. ► All physician examiners have considerable training and experience in marine occupational medicine. ► All physician examiners are pursuing continuing education over and above the requirements of the marine medical branch. ► In addition to the regulated marine medical examiner examination, the Atlantic Offshore Medical Services provides biannual pilot examinations that are specific for the job demands and working conditions of pilots. ► The Atlantic Offshore Medical Services is the custodian of the medical records for pilots that include all scheduled/regulated examinations and also "interim" assessments for injuries or illnesses which provides a sufficient knowledge of a pilot's medical history. ► The Atlantic Offshore Medical Services has a quality assurance system that meets internationally recognized standards (ISO 9001:2008).
Laurentian Pilotage Authority	The Pilotage Authority has contracted pilot examinations to Medisys occupational health clinics. However, there are no designated physicians knowledgeable or aware of the job demands and working conditions of pilots.
Great Lakes Pilotage Authority	The Pilotage Authority has arrangements with a designated physician who provides oversight of the marine medical examiners reports and provides a pilot's final fitness opinion to the Pilotage Authority as fit/unfit/fit with limitations.
Pacific Pilotage Authority	In addition to having a Transport Canada marine medical certificate, pilot candidates require a separate assessment that focus on substance abuse and mental health issues. Pilots are required to have biannual medical assessments by a marine medical examiner of their choice. The British Columbia Coast Pilots have their own independent medical assessment program.

While the processes are significantly different, each has its benefits and shortfalls. As with other regulatory requirements, the medical requirements for pilots should be consistent amongst all Pilotage Authorities unless there is evidence that demonstrates otherwise. Transport Canada and the Pilotage Authorities should undertake a review of the current practices and develop a best practice guideline for assessing the medical fitness of pilots.

Recommendation 25

I recommend that Transport Canada undertake a review of the processes for determining medical fitness of pilots and develop a best practice guideline.

6.7 The Arctic

On December 20, 2016, Prime Minister Justin Trudeau announced that a new Arctic Policy Framework would be co-developed in collaboration with Indigenous, Territorial, and Provincial partners. Marine transportation plays an important role in the sustainability and development of the Canadian Arctic and will be an important element in this new policy framework.

While the resupply of communities currently makes up the majority of maritime traffic, there is a relatively significant volume from other activities occurring in the Canadian Arctic.[30] Commercial fishing generates a significant number of trips, cruise activity continues to grow each year, and resource development projects generate traffic for the supply of goods and shipping of resources to markets.

Climate change is having a major effect on the coastal areas, as evidenced by the dense, multi-year ice giving way to thin layers of seasonal ice. Combined with technological advances, larger areas that were previously inaccessible are becoming navigable. These changes afford increased access to economic resources, along with new interest in developing the Arctic's natural resources and are likely to increase offshore exploration and extraction of oil and gas and metal ores. The North is also experiencing a small but growing number of luxury expedition cruises and research vessel activity. Warming temperatures are also encouraging a longer navigation season, and the prospect of a shorter transit route connecting the Pacific and Atlantic Oceans is resulting in an increased interest for vessels transiting Canada's Northwest Passage. This aspect of Arctic navigation was prominent during the 2017 season with the transit of the Northwest Passage by two prominent sovereign vessels: the Chinese icebreaker Xue Long and the American ice-strengthened buoy tender Maple. Both transits speak to the interest and desire of other Nations to demonstrate the use of the Northwest Passage as a viable route for shipping in the future.

Although the expected timelines for a significant increase in traffic is currently unclear and growth should not be overstated, increased marine traffic in the Canadian Arctic is already a reality. As depicted in Table 17, over the past 10 years, the Canadian Arctic has seen vessel traffic more than double. While the absolute number of vessels and transits in the Arctic

30 While there is no consistent definition for the Canadian Arctic as it applies to marine traffic, an exact definition is not crucial for the purposes of this report. The term Canadian Arctic or Canadian North will refer to the waters in the regions of Canada located north of 60 degrees. It is recognized that certain Land Claims agreements, Provincial Northern areas in Manitoba, Quebec and Labrador and other applications do not necessarily align with this definition but would be considered during the implementation of any changes.

remains low in comparison to southern Canadian waters, the Arctic has experienced average growth of approximately 10% year-to-year. For Inuit and other Northerners, the increase in vessel traffic experienced between 2014 and 2017 was exponential. This local perspective should be considered when assessing the impacts of shipping.

TABLE 17: GROWTH IN ARCTIC CANADIAN VOYAGES

Source: **Canadian Coast Guard Marine Communication Traffic Services (MCTS) Iqaluit.**

While the overall area and routes of navigable water in the Arctic is growing, the Arctic marine environment remains vast and demanding and presents significant navigation challenges. There are major variations in the presence and predictability of ice on a year-to-year basis, weather conditions are less predictable, and there is an increased presence of ice flows and variability in sea states and conditions in open waters. Additionally, ships travel through environmentally sensitive areas that are traditional areas for Inuit. At both the national and international level, it is widely recognized that action needs to be taken to improve the safety of navigation and the protection of the marine environment in the Arctic. In the Canadian North, these actions need to be in line with domestic and international legislation and agreements as well as with the modern land claims established between the Crown and Inuit Canadians.

As pilotage services are a key element of any marine safety framework, the review of pilotage in the Canadian Arctic is timely. While the Great Lakes Pilotage Authority has the mandate to provide pilotage services for vessels operating in and out of the Port of Churchill, there are currently no authorities for pilotage in the Arctic. There are however, isolated cases of individual, entrepreneurial pilots providing services in support of resource development. This situation points to the growing need to assess the pilotage requirements in the North as part of the overall marine safety regime.

Canada is currently enhancing the marine safety framework in the Arctic through two major initiatives. Transport Canada is implementing the *International Code for Ships Operating in Polar Waters* (Polar Code) and secondly, the Canadian Coast Guard, Canadian Hydrographic Services, and Transport Canada are collaboratively establishing Low Impact Shipping Corridors for the Arctic under the Oceans Protection Plan. The necessity for pilotage services and how it could be offered in the Canadian Arctic was assessed in the context of the work being done for these initiatives.

The International Maritime Organization has developed the mandatory Polar Code which entered into force internationally on January 1, 2017. The primary objective of the Polar Code is to address the hazards confronted by vessels operating in the Arctic and Antarctic (the Polar Regions) through the introduction of a variety of safety and pollution prevention measures, including those related to design and equipment, vessel operation, crew training, communications, onboard procedures, and protection of the marine environment. The Polar Code applies to vessels of 500 gross tonnage or more and passenger vessels. It does not apply to fishing vessels, pleasure craft, or vessels without a mechanical means of propulsion.

As party to the Polar Code, Canada is implementing the safety-related aspects through the *Arctic Shipping Safety and Pollution Prevention Regulations* under the authority of the *Arctic Waters Pollution Prevention Act*. The proposed regulations include a provision that would incorporate by reference the Polar Code as well as provisions imposing additional Canadian requirements. In short, the provisions would apply to Canadian vessels operating in Polar Regions worldwide and to foreign vessels operating within Canada's "shipping safety control zone" which is essentially the waters in the regions of Canada located north of 60 degrees excluding rivers, lakes, or fresh water.

Chapter 12 of the Polar Code, Manning and Training, provides that ships operating in polar waters are appropriately manned by adequately qualified, trained, and experienced personnel. It also contains provisions for ships' master, chief mate, or officer in charge of the navigational watch to be trained and qualified to operate in ice-free, open, or other waters. Additionally, it recognizes a person other than a ship's officer who is suitably qualified to meet the requirements of an ice navigator. The proposed *Arctic Shipping Safety and Pollution Prevention Regulations* requires the carriage of a qualified ice navigator under certain vessel operating capabilities and limitations and for vessels between 300 and 500 gross tonnage that are not covered by the Polar Code.

Canada has had the concept of "ice navigator"[31] as an integral component of its Arctic marine safety regime since 1970. The ice navigator essentially acts as an advisor to the ship's master on the ice conditions through which a vessel may be navigating and is not required to be a permanent member of the crew. The *Arctic Shipping Pollution Prevention Regulations* set out the circumstances under which an ice navigator is required to be on board the vessel and details the particular experience required to become an ice navigator. While not a certified pilot, an ice navigator possesses a very specialized knowledge and skills for navigating in Arctic waters not typically found on board vessels.

Transport Canada will accept a self-declaration of an ice navigator based on the provision of records that confirm minimum experience requirements have been met, and that the candidate has a valid marine medical certificate. However, no certificate is issued for this designation as an ice navigator. The 2016 *Canada Transportation Act* Review noted that concerns have been expressed about the lack of ice pilots with adequate experience in Canadian Arctic shipping, which could lead to a serious safety issue.

The vast majority of vessels currently operating in the Canadian North are doing so in a safe and responsible manner. However, increased activity will lead to an increase in new and likely inexperienced operators. The additional Polar Code requirements being implemented through

31 The *Arctic Shipping Pollution Prevention Regulations* uses the term ice navigator while other regimes refer to ice advisor and ice pilot. For the purpose of this report, the terms are used interchangeably.

the new *Arctic Shipping Safety and Pollution Prevention Regulations* will significantly enhance the qualifications of the crew for operating in the North. While the number of vessels operating in the Arctic not covered by the Polar Code is limited to pleasure craft, fishing vessels, and cargo vessels between 300 and 500 gross tonnage, and the vast majority of these vessels are Canadian operated by crew with Arctic experience, the requirement for them to carry an ice navigator will ensure an additional level of safety. An enhanced training, testing, and certification requirement would strengthen the current ice navigator regime and should be examined by Transport Canada.

It is believed that the implementation of the Polar Code and additional Canadian requirements will mitigate the need for Arctic pilotage services in the short term.

Recommendation 26

I recommend that in support of the implementation of the Polar Code, Transport Canada:

- Amend the Marine Personnel Regulations to formally recognize crew experience, training and qualifications required under the Polar Code and ensure an appropriate level of oversight; and
- Enhance and formalize training, testing and certification of an ice navigator to better reflect and ensure their core competencies.

The Low Impact Shipping Corridors are dynamic shipping routes that will be located throughout the Arctic where the necessary infrastructure, marine navigational support, and emergency response services are provided to support safer marine navigation while respecting the environment and its ecological significance. The initiative is being co-led by the Canadian Coast Guard, the Canadian Hydrographic Services, and Transport Canada who are working with Indigenous groups and stakeholders to validate the shipping routes and identify infrastructure and service requirements through a risk-based approach.

In support of the implementation of the Corridors, Transport Canada will lead the development of a collaborative governance model for Arctic marine shipping. The governance model will be inclusive of Indigenous people, reflect and respect the modern land claims in place, and oversee the development, implementation, and management of the corridors.

Once the governance structure is in place, the appropriate mix of management oversight, navigational services, infrastructure, knowledge, and emergency response services required to meet the changing safety needs of marine transportation will be determined. As a critical element of the marine safety framework, the necessity for pilotage services would be included in this exercise.

The requirements and investments will need to be guided by a comprehensive risk analysis. The Navigation Risk Assessment Methodology outlined earlier in this chapter would be an appropriate model for this exercise. It would include a scan to identify the services (e.g., aids

to navigation, communications, advisory services, ice navigators, pilots etc.). Once identified, the high-risk areas would be subject to a robust navigation risk assessment that would propose mitigating measures to manage the risk and hazards.

The development and implementation of the Low Impact Corridors is a longer-term initiative. Currently it is expected that the analyses and recommendations for implementation and the establishment of a governance model is not anticipated until 2022. Canada is moving in the right direction and given that the implementation of the Polar Code will enhance the qualifications of a ship's crew and mitigate the need for pilots in the short term, pilotage services should be established in the context of any comprehensive navigation risk mitigation assessments that would be conducted in support of the Low Impact Corridors. However, given the work that has been done to date and the positive reception by partners and industry, there is an opportunity to accelerate the implementation of the governance structure and the conduct of risk assessments.

Recommendation 27

I recommend Transport Canada, the Canadian Coast Guard, and the Canadian Hydrographic Services place a priority on an accelerated timeline to develop and implement the Low Impact Corridors management structure and assess the need for pilotage services as a possible mitigating measure identified by a robust Navigation Risk Assessment Methodology.

In addition to determining whether pilotage is necessary in the Arctic, consideration must be given to the structure and administration of the delivery of pilotage within the Corridors. One option would be to explore adding the responsibility for the Arctic to one of the existing Pilotage Authorities. However, special attention would have to be given in order to respect the principle of the modern land claims agreements, to maximize the incorporation of local and traditional knowledge, and to ensure effective responsiveness.

A mechanism would need to be established to ensure these aspects were appropriately recognized, perhaps through a northern office. Incorporating such a large area with relatively low levels of traffic into an existing Pilotage Authority would place a significant financial burden on that Pilotage Authority that would have to be carefully assessed. Another option would be to establish a separate Pilotage Authority that could focus on the unique characteristics and requirements for safe navigation in the North. Given the relatively low levels of traffic forecast for the medium to long term and the large geographic area of coverage, it is highly unlikely a separate Pilotage Authority would be able to levy sufficient fees to maintain financial self-sufficiency in the foreseeable future. Third, private, entrepreneurial pilots could be engaged to provide services in the specific areas identified through the risk assessments. Regardless of the approach selected, it should be supported by a management board for broader governance of shipping in the Arctic.

As noted earlier, the Corridors initiative is mandated to establish a governance model to oversee the development, implementation, and management of the marine navigation safety services that would be provided in the North. The Government of Canada has made a commitment to

develop and manage the governance structure collaboratively with the Territorial governments and Inuit Canadians. The involvement of Indigenous people is critical to any pilotage service delivery model, given their local knowledge and experience.

> *"Indigenous peoples provided the very first pilots to European explorers during the beginnings of Canada and, nowadays, shipping activities significantly impact territories and resources on which they rely, as was illustrated again recently in British Columbia with the grounding of the tug Nathan Stewart. In the same way, without a doubt, Inuit people have a key role to play if the implementation of a pilotage system is ever seriously considered for Arctic waters."*
>
> ***Canadian Marine Pilots Association submission, p. 9***

Recommendation 28

I recommend that the governance structure for pilotage services in the Canadian Arctic be assessed under a joint management structure being developed for the Low Impact Corridors.

Courtesy of the Great Lakes Pilotage Authority pilots

TARIFFS AND FEES

Few subjects in the Canadian shipping community have aroused as much debate throughout the years as service fees, including pilotage tariffs. This is not surprising since pilotage tariffs currently represent 20% to 25% of all marine service fees paid by vessels operating in Canadian waters.[32]

Given that Pilotage Authorities receive no appropriations from Parliament, revenues required to maintain pilotage operations must be generated through tariffs and, to a much lesser extent, other fees. These tariffs and fees must be enacted through regulations under the *Pilotage Act*. For a variety of reasons, it is not always possible for the Pilotage Authorities to generate the revenues necessary to ensure financial self-sustainability. These include the misalignment of planning and tariff-setting processes, and unpredictable fluctuations in the demand for services caused by shifts in shipping volumes.

The regulatory process is lengthy, and tariff changes can take nine months or longer to process. The Pilotage Authorities normally undertake consultations with the users in advance of their planned increases. Once finalized, the amendments for the fee increases are pre-published in the *Canada Gazette*, Part I for 30 days. Anyone can provide comments or object to the increase at this stage. If no objections are received, the Pilotage Authorities can submit the amendments for approval by the Governor in Council, on the recommendation of the Minister of Transport. The Pilotage Authorities have no control over the timing and approval processes for their amendments, but any delays in processing tariff increases have a direct impact on the Pilotage Authorities. For example:

> *"More recently in 2017 we lost almost $150,000 as a result of a one month delay in getting our tariff approved and this was in spite of support from the marine industry we serve."*
>
> **Pacific Pilotage Authority submission, p.3**

Losses and costs associated with these delays ultimately must be recovered from the shipping industry in the form of future tariff increases or surcharges.

32 http://www.tc.gc.ca/eng/policy/pilotage-act-review-discussion.html

"The Authority initiated its tariff process in September 2016. The 2017 tariff was published in February 2017 and received Governor in Council approval in June 2017, therefore the 2017 tariff adjustments were delayed until June 2017 (10 months after the start of the process). The Authority has calculated that this long delay will cost GLPA close to $325,000 in 2017 which is proposed to be recuperated with a compensating 1.5% tariff increase in 2018 in addition to its proposed 2018 adjustments to all users."

Great Lakes Pilotage Authority submission, p.2

Although they recognize the value of pilotage services, stakeholders believe that the ever-increasing tariffs for pilotage services are often set with insufficient justification, making it difficult for them to assess the business case for the increases. In their view, the Pilotage Authorities are driven more by the need to ensure financial self-sustainability than they are to ensure value for shippers.

"...the current structure has led to a pilotage system that is unable to ***control costs*** *or* ***consistently provide users with the level of service they require*** *in a highly competitive marine transportation economy."*

Shipping Federation of Canada submission, p.6; emphasis in original

Under the current regime, the Pilotage Authorities have little incentive or capacity to seek cost-reducing efficiencies through new maritime technologies and innovations. Unless such options are explored, stakeholders fear that tariff costs will continue to spiral out of control. All stakeholders question why tariff increases constantly exceed the Consumer Price Index, a standard they believe should be applied.

Although tariffs are rising continuously, stakeholders assert that the increases are not matched by equivalent improvements to service levels. Many identified a need to better define service levels for performance measurement purposes.

"Strengthen the use of Key Performance Indicators in order to increase transparency and ensure greater focus on service efficiency."

Shipping Federation of Canada Submission, p. 3

As a result, it is clear: the tariff regime needs to be fixed.

7.1 Regulatory Process and Business Alignment

One of the main challenges faced by Pilotage Authorities is the disconnection between the federal regulatory process, which must be followed to enact tariffs, and the annual planning process the Pilotage Authorities are subjected to under the *Financial Administration Act.*

Because tariffs often become effective long after annual plans have been approved by the Treasury Board, revenue assumptions made in those plans can be invalidated by delays in the regulatory process.

Significantly, the disconnection between the two processes has grown considerably over time, often stretching the ability of Pilotage Authorities to remain fully self-sustainable financially.

This is because today's federal regulatory process is very different from the one that existed when the *Pilotage Act* was originally enacted in 1972. From 1972 to 1986, enacting regulations was a relatively simple and therefore quick and frequent occurrence. It could take as little as a month to complete the regulatory process from beginning to end. With the advent of the federal government's first federal regulatory policy in 1986, Cabinet began challenging regulatory proposals much more critically. Today, the Cabinet Directive on Regulatory Management is even more demanding than its predecessors, the result being a much slower regulatory process.

This has had significant impacts on the Pilotage Authorities, who must enact tariffs through this process to sustain current-year operations. Due to the length of the modern regulatory process, it is becoming increasingly difficult to match revenues with current-year operational requirements. Resulting deficits must then be recovered through surcharges or larger tariff increases in subsequent years.

Other models

Other non-departmental agencies such as Port Authorities and NavCanada, can fix fees through *non-regulatory instruments*. Nevertheless, both the decisions and processes must be public and each agencies is accountable for those decisions.

The process for the Port Authorities is outlined in the *Canada Marine Act*. The *Canada Marine Act* allows the Port Authorities to set fees for specific purposes, requiring that they are both fair and reasonable, and that they allow the Port Authorities to operate on a self-sustaining basis. There are provisions for notification, stakeholder comments, and recourse to the Canadian Transportation Agency on the grounds of discrimination.

The *Civil Air Navigation Services Commercialization Act* also allows the Corporation (e.g., NavCanada) to set fees for its services. These are set according to a set of charging principles that incorporate the ideas of both fair and reasonable charges that allow the Corporation to cover its costs. The fees are not intended to generate revenue and the legislation outlines the types of expenses that should be considered when determining fees. Notice of revised fees must be transmitted to stakeholders who have an opportunity to comment on any planned increases. Appeals may be filed with the Canadian Transportation Agency and objection grounds are limited to whether NavCanada complied with the charging principles, consultation, and notice requirements.

Given the challenges with the regulatory process, the Pilotage Authorities have repeatedly advocated for a tariff setting process similar to that used by the Port Authorities under the *Canada Marine Act*.

"The APA recommends a tariff or fee regime be implemented that is similar to that allowed [for] Port Authorities under the Canada Marine Act, including similar process and methods of notification. The APA supports having a transparent consultative process with the ability for affected parties to file a notice of objection with the CTA, to be settled in a timely manner."

Atlantic Pilotage Authority submission, p.5

However, as pilotage services are a regulated monopoly in Canada, there must be some checks and balances in any fee setting process. First, it must be clear that the tariffs and fees must be reasonable and only what is required to operate on a self-sustaining basis, rather than to generate profits. Consultation with stakeholders normally occurs before the tariff increases have been finalized and the Pilotage Authorities have often modified a proposal in order to respond to industry feedback. This type of consultation must remain a central feature of any new system. In order to facilitate this, clear legislative requirements related to providing notice of fee increases, and a sound rationale/cost benefit analysis for any increases above the previous year's Consumer Price Index should be central features in any revised fee setting exercises.

Secondly, including charging principles or expense criteria in the *Pilotage Act* would provide mechanisms to ensure that revenue generation, program management, and service delivery is within the mandate of the Pilotage Authorities.

Finally, to respond to stakeholder concerns about the rapid rise of tariffs, it is worthwhile to consider whether increases beyond a certain threshold should be subject to more rigorous oversight by the Minister of Transport or the Governor in Council.

Recommendation 29

I recommend that the *Pilotage Act* grant the Pilotage Authorities complete authority to fix tariffs and other fees as is the case with NavCanada and the Port Authorities. Any tariff or fee-setting authorities should be exercised under clear directions and guidelines established in the *Pilotage Act* with proper notice and consultation with stakeholders.

Research conducted under the *Pilotage Act* Review, noted that the tariff methodologies vary considerably between the Pilotage Authorities. Noting this variance, stakeholders recommended that the Pilotage Authorities adopt common, transparent tariff-setting methodologies. To the greatest extent possible, and irrespective of the number of Pilotage Authorities that exist after the *Pilotage Act* is revised, Pilotage Authorities should make every effort to establish tariffs using the same methodology. Tariff differences should occur only when regional and operational considerations demonstrably justify different rates.

Recommendation 30

I recommend that when setting tariffs, the Pilotage Authorities rely on similar methodologies.

7.2 Sanctions for Non-payment

In their submissions, the Pilotage Authorities were unanimous in their desire to see a tariff-setting framework similar to the one applicable to Canadian Port Authorities under the *Canada Marine Act*. Under that Act, Port Authorities may levy interest charges and fix the interest rate that is applicable for overdue payments. The management of overdue payments is particularly important to organizations that rely entirely on revenues to maintain self-sustainability and is consistent with the business practices of most organizations.

Recommendation 31

I recommend that Pilotage Authorities be authorized to impose interest charges on late payments for all tariffs and fees.

7.3 Objections

Both the Pilotage Authorities and their stakeholders support a continued role for the Canadian Transportation Agency in reviewing tariffs but have proposed some changes to the process.

As currently drafted, the *Pilotage Act* creates situations in which any person may file objections to tariffs at a point in time when the regulatory process *has not yet been completed*. Normally, adjudicative bodies consider matters *after* a final decision has been made by the responsible authority, not *during* the decision-making and approval process.

In addition, the grounds for objections to tariffs are considerably broader than, and potentially incompatible with, the standards that Pilotage Authorities have to meet when setting tariffs. Although the "public interest" is a well-understood concept, it is arguable whether it is sufficiently relevant as a standard for Canadian Transportation Agency reviews of pilotage tariffs. Pilotage tariffs are established by organizations operating without Parliamentary appropriation and apply only to a well-defined client base benefiting from an equally well-defined set of services. Applying a broad public interest standard to specific transactions like tariffs for services could potentially conflict with the self-sustainability obligations of the Pilotage Authorities. Public interest tests are probably better suited to evaluations of the overall contribution of pilotage to navigation safety in general.

The NavCanada regime offers a comprehensive and specific set of provisions that govern how charges are to be developed, implemented, and appealed. First, NavCanada must observe "charging principles" in determining appropriate charges. Although the principles (or criteria) governing pilotage tariffs would likely be different, the tariff-setting process would be significantly improved if such principles governed tariff-setting decisions. Secondly, the *Civil Air*

Navigation Services Commercialization Act clearly identifies which operational expenditures may be taken into account when determining current and future financial requirements. Finally, the grounds for objections to charges are limited to factors directly related to the charging principles under which charges were established. For example, a failure to meet charging principles or consultation requirements identified in the Act could lead to successful objections.

A correspondence between charging principles and grounds for objections would make the objection process much clearer. Moreover, it would prevent objections on the basis of considerations that exceed the scope and objectives of the *Pilotage Act*. Therefore, the Canadian Transportation Agency reviews should be limited to a Pilotage Authority's failure to comply with new tariff-setting guidelines or processes set out in the *Pilotage Act*. Issues to be considered in Canadian Transportation Agency reviews could include whether a Pilotage Authority failed to meet new statutory guidelines and other procedural requirements, e.g., failure to consult adequately or failure to demonstrate an operational requirement according to new national tariff-setting methodologies.

The question that remains is whether the Canadian Transportation Agency should substitute its own tariff when it disagrees with a Pilotage Authority, or whether it should refer the tariffs back to the Pilotage Authorities for reconsideration and adjustment. A non-regulatory process would allow the Pilotage Authorities to make such adjustments almost immediately, hence satisfying stakeholder expectations without risk to financial self-sustainability.

As the *Pilotage Act* is currently drafted, even those who are completely unaffected by pilotage tariffs could potentially file objections with the Canadian Transportation Agency. As this could pave the way towards frivolous or irrelevant objections, only those subject to pilotage tariffs should be eligible to file objections with the Canadian Transportation Agency.

Recommendation 32

I recommend that the grounds for filing a tariff objection to the Canadian Transportation Agency be limited to compliance by the Pilotage Authorities with clearly specified statutory criteria (including Pilotage Authority operational considerations) and processes, and that only those subject to tariff charges, or their representatives and associations, be able to file objections.

The Canadian Transportation Agency currently has 120 days to render a decision when a tariff objection is filed. The Pilotage Authorities have proposed reducing that period to 60 days in order to mitigate the impacts of mid-business-cycle decisions that reduce projected current-year revenues that cannot then be recovered without another regulatory amendment. Under the current objection process, tariffs are held in abeyance pending a Canadian Transportation Agency decision. Since the Canadian Transportation Agency has 120 days to render a decision, required additional revenues can be lost pending that decision for up to a full third of the operational year.

The *Service Fees Act*, which received Royal Assent on June 22, 2017, outlines a complaints process. Under this process, a Panel is constituted within 30 days of receiving a complaint, and the three-person Panel has 90 days to deliberate and issue a report. The 90-day timeframe can only be extended once, to a maximum of 30 days. However, any recommendations made by

the Panel are not binding on the organization. Since the current 120-day timeframe to resolve objections to pilotage tariff increases is perceived as being too lengthy, and 60 days may not provide the Canadian Transportation Agency with enough time to review an objection, using the standard adopted in the *Service Fees Act* should be an adequate compromise, and allow for a comprehensive review of any complaint.

Recommendation 33

I recommend that the Canadian Transportation Agency render decisions no later than 90 days after receiving a notice of objection.

7.4 Alternative Revenue Sources

Pilotage Authorities currently provide a number of services and products for which they cannot recover costs, leaving them almost completely dependent on pilotage tariffs to ensure financial self-sustainability. In most cases, the authority to charge for other services and products is either lacking or the *Pilotage Act* is not entirely clear on what existing authorities would allow.

> *"The Pilotage Authorities have been called upon over the years to provide technical expertise to various project proponents. Pilotage Authorities are fully funded by the fees paid by industry and some of the services currently provided by the Pilotage Authorities do not directly benefit industry. The Pilotage Authorities should have the ability to charge other fees for consulting or managing other services such as pilotage waivers, on a cost recovery basis."*
>
> ***Chamber of Shipping of British Columbia submission, p.15***

Pilotage Authorities could fix fees for consultations and expert advice, pilot and ship personnel certifications and training, use of simulators and other facilities, the issuance of certificates and waiver renewals/lost certificates, and testing to establish qualifications for certificates. New statutory authorities should be broad enough to cover existing and new services and products.

In addition, despite any other schedule of tariffs, Pilotage Authorities should be authorized to fix tariffs by contract or other agreement with stakeholders.

Expanding the range of products and services for which the Pilotage Authorities may charge fees will enhance their ability to remain self-sustaining financially while reducing the reliance on tariffs to do so. Setting tariffs by agreement or contract with interested stakeholders would allow Pilotage Authorities to customize service arrangements. Assuming that all services and products provided are similar in design and cost structure, the methodology to calculate fee levels should be the same across regions.

A review process for specific service and product fees (other than tariffs) would unduly complicate day-to-day management of Pilotage Authority operations. Managers are best placed to assess the reasonable costs of providing various services and products and should be afforded the freedom to do so.

Recommendation 34

I recommend that beyond tariffs for pilotage, the Pilotage Authorities be authorized to fix fees for all other products and services provided by them. I further recommend that Pilotage Authorities calculate fee levels using the same methodology and that these fees be exempt from the filing of objections to the Canadian Transportation Agency.

These changes, if adopted, will provide the Pilotage Authorities with more latitude to set their fees and tariffs than what is currently offered through the regulatory process. It will provide them with the freedom to match their fees with traffic fluctuations, incentives or promotions to attract new business, and to accurately tailor their tariffs to their needs. Mandating that the tariffs be established to support financial self-sufficiency, to not generate profits, and to use similar methodologies will assist in supporting transparency. Preserving the Canadian Transportation Agency's current role as an arbitrator and introducing consideration of more strict requirements for fees set above the Consumer Price Index will assist in ensuring accountability.

TECHNICAL AMENDMENTS

The following section outlines specific technical amendments that should be considered for the *Pilotage Act*.

8.1 Broaden the Pilotage Authorities' Power to Invest

Section 37 of the *Pilotage Act* allows the Pilotage Authorities to invest in "bonds or other obligations of or guaranteed by Her Majesty in right of Canada, or any province or any municipality in Canada, any moneys not immediately required for the purposes of the Authority".

Budget 2017 outlined that the Canada Savings Bonds were being phased out due to a decline in the program's popularity that is attributed to the proliferation of higher yielding investment instruments such as Guaranteed Investment Certificates, mutual funds, and low-commission trading accounts.

Therefore, investments for the Pilotage Authorities are restricted by virtue of the *Pilotage Act* to provincial and municipal bonds. Not every province or municipality offers bonds. For example, while both Ontario and Quebec offer provincial savings bonds, Saskatchewan, British Columbia, and Alberta have all decided to discontinue their savings bond programs. In cases where they are available, bonds may be less attractive as an investment instrument than a Guaranteed Investment Certificate due to the lower rate of return.

> *"The APA recommends that the Pilotage Act be amended to give the Authorities the same powers to invest as the Port Authorities have in the Canada Marine Act."*
>
> ***Atlantic Pilotage Authority submission, p. 6***

Recommendation 35

I recommend that the Pilotage Authority be authorized to invest in a broader class of instruments such as Guaranteed Investment Certificates.

8.2 Review of the *Pilotage Act* and the Appointment of Panels

Legislation can be reviewed through a variety of mechanisms. This includes an internal review conducted by any government department to respond to an issue or to consider whether an Act should be updated or modernized. Legislative reviews can also be conducted by using an independent panel with one or more experts supported by a secretariat, generally composed of Departmental personnel. Finally, a Parliamentary Committee can examine legislation or activities, which requires an order of the House or "Order of Reference" to refer matters to

a standing committee. Using a panel approach, independent Chairperson, or conducting a review through a Parliamentary Committee can assure the public and Minister that both the review and recommendations are free of bias. Finally, an Act may contain a provision to review amendments within a set timeframe to assess the impact of previous amendments. Generally, this is done within five years of the amendments.

The *Pilotage Act* does not contain a specific provision related to the periodic review of the Act. The periodic and ad-hoc nature of previous reviews has resulted in a review of the *Pilotage Act* or pilotage issues on a five to ten year basis. It can take a year or more to receive authority to undertake a review, and the amount of time that it can take to review pilotage issues can vary greatly depending on the scope of the issues. For example, the longest review of pilotage issues took approximately six years (the Bernier Commission) while the 1999 Canadian Transportation Agency Review was conducted within a year. Therefore, reviewing the *Pilotage Act* every five years could result in a state of "continuous review," between seeking Authority and funding to undertake the review, assembling the required expertise, conducting research and consultations and writing the final report. In the March *Pilotage Act* Review Roundtables, some stakeholders suggested it may be important to evaluate any amendments undertaken as a result of this Review and it may be preferable to review the *Pilotage Act* more often than every ten years. Review of the *Pilotage Act* at the discretion of the Minister is also possible, but regardless of the timeframe, a clear provision should be included in the *Pilotage Act* to facilitate its review and the appointment of a panel or Chairperson, as appropriate.

Recommendation 36

I recommend that the *Pilotage Act* be reviewed at least every ten years, and consideration be given to a status review five years after promulgation given the large number of changes proposed. I also recommend that the *Pilotage Act* provide the Minister of Transport with the authority to engage an independent panel or individual to undertake these reviews.

8.3 Key Performance Indicators

All of the Pilotage Authorities report on safety incidents and delays. Some of the Pilotage Authorities track a wider range of indicators including overhead targets and complaints. During the course of the Review some stakeholders noted that there are few common Key Performance Indicators outside of tracking safety and delays (which are reported differently) and that common Key Performance Indicators would assist in benchmarking performance among regions.

> *"In other words, strengthening the use of KPIs [Key Performance Indicators] – established on a regional basis (e.g., number of assignments per pilot, costs per assignment, etc.) – would formalize the vision for a measurement of efficiency in pilotage in a region, while still enabling benchmarking of performance between regions."*
>
> ***Shipping Federation of Canada submission, p.7***

Chapter 6 has outlined the need for more granularity and standardization for Key Performance Indicators for safety. However, it is worth examining the potential to achieve this in other areas (e.g., indicators to measure "efficiency") and compare against other indicators used in marine shipping or the public sector. Determining a practical and useful set of Key Performance Indicators that are standardized amongst the Pilotage Authorities may be an appropriate task for the National Advisory Committee, once constituted.

Recommendation 37

I recommend that a common set of Key Performance Indicators are developed to facilitate common reporting and tracking of performance across all of the Pilotage Authorities.

8.4 Greater Cooperation with the United States

Some stakeholders have suggested that some aspects of pilotage services in the Great Lakes region could be studied further, such as requirements for pilotage in open waters. Pilotage in the Great Lakes region is coordinated between the Canadian and United States regulators and service providers. Although the Canadian Pilotage Authorities have good relationships with both the United States Coast Guard and United States pilot associations, it may be worthwhile to consider if there is a way to study this suggestion further. Secondly, it may be worthwhile to explore mechanisms to facilitate greater cooperation with state governments on each coast to determine if there are any service delivery improvements that could be made to present a seamless service to users.

8.5 Amend the Name of the Laurentian Pilotage Authority

One stakeholder submission noted an inconsistency with the name of the Laurentian Pilotage Authority in French.

> *"Use Article 4 b) to provide* l'Administration de pilotage des Laurentides *(with Laurentides referring in French to mountains) with a new term (such as Saint-Laurent or Laurentian) to properly reflect the character and the mission of the maritime pilotage authority and the nature of the territory to which the term refers."*
>
> ***Groupe Desgagnés Inc. and Fednav Ltd. submission, p. 8***

Recommendation 38

If Recommendation 3 is not implemented, I recommend that the name of the Administration de pilotage des Laurentides be changed for clarity.

8.6 Administrative Amendments to the *Pilotage Act*

Stakeholder submissions have suggested a number of technical amendments to the *Pilotage Act*. These include amendments to certificates (e.g., specify expiry dates, renewal requirements, etc.) as well as concordance edits and terminology changes. These technical changes should be reviewed within the scope of any work related to legislative changes.

Courtesy of the Great Lakes Pilotage Authority (GLPA)

CONCLUSION

I am honoured to have been given this opportunity to review the *Pilotage Act*. Pilotage services support the Canadian economy through its vital contributions to the safety and efficiency of marine trade and transportation.

Over the last eight months, I have grappled with the issues and concerns facing the pilotage system's regulators, administrators, providers, and users. This report is the product of a comprehensive examination of the structure and delivery of pilotage services in Canada and charts the way forward for the modernization of the *Pilotage Act*.

To inform the *Pilotage Act* Review, the participation and input of stakeholders was sought from across the country. It is through engagement with the Pilotage Authorities, pilots, shipowners and industry associations, and other relevant marine stakeholders that this Review was made possible.

The body of this report addresses five key components of the *Pilotage Act*: its purpose and principles, governance models, labour structure, safety framework, and tariff-setting process. After months of consultation and careful consideration, recommendations have been proposed as a means to address deficiencies in the current pilotage system and to improve its overall organization and functionality.

While it is largely agreed upon that the pilotage system in Canada works well, it is now time for the legislation to be updated to reflect the realities of today, as well as the possibilities and innovations of the coming future.

Courtesy of Transport Canada

Appendix A:
List of Recommendations

PURPOSE AND PRINCIPLES

#1 I recommend that the *Pilotage Act* be amended to enhance policy clarity, predictability and national consistency, through an expanded statement of legislative purposes, and governing policy principles. The new provisions should be substantially consistent with the National Transportation Policy and could comprise:

- A Preamble, setting out the rationale for legislative action and the linkages to the broader public interest, including environmental protection.
- A Purpose clause that clearly outlines the government's legislative purpose – the establishment of a safe, efficient, responsive and accountable national system of marine pilotage as a regulated monopoly – and the public outcomes the legislation is meant to secure.
- A statement of governing policy principles for the national marine pilotage system, including: ensuring the highest practicable standards of safety; efficiency and cost-effectiveness in service delivery and responsiveness to users' needs; application of risk management principles in decision-making; optimize the use of new technologies and continuous improvement of operations and services; transparency and accountability in all parts of the pilotage system; financial self-sufficiency of Pilotage Authorities; and fairness and reasonableness in fee- and tariff-setting.

#2 I recommend that the government make a commitment to developing and implementing a code of conduct for all licensed marine pilots, either as a regulation or as professional guidance, through a deliberative process undertaken by the National Advisory Committee, whose creation I propose later in this report.

GOVERNANCE

#3 I recommend that the Great Lakes Pilotage Authority and the Laurentian Pilotage Authority be amalgamated into the St. Lawrence and Great Lakes Pilotage Authority, headquartered in Montreal, with a view to reducing costs, increasing efficiency, and providing a basis for assessing the feasibility and desirability of more extensive consolidations.

#4 I recommend that the Board of Directors for the merged Great Lakes Pilotage Authority/ Laurentian Pilotage Authority be comprised of nine members. I also recommend that the Board of Directors of the Atlantic Pilotage Authority and the Pacific Pilotage Authority be comprised of seven members, and the Chief Executive Officer, *ex officio*, as a non-voting member in both cases.

#5 I recommend that persons who have a current relationship with or interest in any organizations comprising or representing pilots or shipowners should not be eligible for appointment as Directors, and for at least one year after leaving the position. Finally, the Chairperson should not perform the functions of the Chief Executive Officer or be responsible for the day-to-day functioning of the organization (e.g., suspension of a license).

#6 I recommend that the *Pilotage Act* provide for the establishment of an Advisory Committee comprising 15 members nominated for appointment by the Minister of Transport, representing a cross section of the Pilotage Authorities, pilots, pilot corporations, domestic and foreign shipping, Port Authorities, labour, Indigenous communities, environmental interests, and Government.

#7 I recommend that one position on the Board of Directors of the Pacific Pilotage Authority be reserved for a representative from the Indigenous communities of British Columbia.

LABOUR

#8 I recommend that the *Pilotage Act* be amended so that the Pilotage Authorities are able to use the workforce configuration that best meets their needs. The Pilotage Authorities should be free to manage, through an effective dispatching system, hiring their own employees, any contracting with a pilot corporation, and use of entrepreneurial pilots in any given district.

#9 I recommend that the final offer selection process be amended such that the arbitrator must consider the purpose and principles of the *Pilotage Act* (as amended in Recommendation 1), when making arbitration rulings.

#10 I recommend that all safety regulatory provisions be removed from the service contracts between the Pilotage Authorities and pilot corporations within one year.

#11 I recommend that the *Pilotage Act* be amended such that all pilot corporations, as monopoly service providers, are subject to greater levels of transparency and accountability. Financial statements and service contracts should be made publicly available, and pilot corporations should be made subject to financial audits and Access to Information requests.

SAFETY FRAMEWORK

#12 I recommend that the *Pilotage Act* be amended to provide the Minister of Transport, with the approval of the Governor in Council, the authority to make all regulations pertaining to pilotage safety. The Act must also clearly state that the *Pilotage Act* and its regulations have primacy over pilotage services contracts.

#13 I recommend that the *Pilotage Act* be amended to provide the Pilotage Authorities with the authority to adopt and enforce binding practices and procedures related to the safe and efficient delivery of pilotage services.

#14 I recommend that Transport Canada, as the independent regulator, establish a comprehensive set of key safety performance indicators.

#15 I recommend that the Government provide the necessary resources to develop the pilotage safety regulatory and oversight capacity in Transport Canada.

#16 I recommend that the *Pilotage Act* be amended to:

a) Include a compliance scheme outlining authorities required to verify compliance; and

b) Provide the Minister of Transport with the appropriate powers to enforce the provisions of the Act and the authority to delegate the enforcement of these provisions, all or in part, to designated persons or classes of persons. The Minister of Transport should designate Marine Safety Inspectors as a class of persons and delegate them enforcement powers once they have had the requisite training.

#17 I recommend that the *Pilotage Act* enforcement provisions be amended to include an Administrative Monetary Penalty scheme that imposes higher penalties for serious violations and distinguishes between fines for individuals and those applicable to corporations/vessels.

#18 I recommend that the *Pilotage Act* be amended to provide the Minister of Transport with the authority to regulate the conduct of pilotage risk assessments.

#19 I recommend that Transport Canada, in consultation with the industry, establish the methodology, standards, guidelines, and regulations for the conduct of pilotage risk assessments, including an impasse resolution mechanism. The risk assessments need to consider all navigational aspects of risk as well as technological advances and should be titled Navigation Risk Assessment Methodology.

#20 I recommend that the *Pilotage Act* be amended to:

a) Establish an objective that Pilotage Authorities must optimize the use of new technologies; and,

b) Provide the minister of Transport with the authority to require the Pilotage Authorities to publish their voyage plans and that the Minister of Transport exercise this authority.

#21 I recommend that the Navigation Risk Assessment Methodology include a requirement that all available technologies must be considered in the determination of pilotage requirements.

#22 I recommend that the Minister of Transport pursue an amendment to subsection 22(2) of the *Pilotage Act* to extend eligibility to all foreign masters and navigation officers for a pilotage certificate and subsequently terminate the Pacific Pilotage Authority waiver program and replace it with pilotage certification. In the interim, the Pacific Pilotage Authority should retain and review the current waiver program in consultation with Transport Canada, Indigenous communities and stakeholders.

#23 I recommend that Transport Canada implement and administer a standardized exemption scheme and stipulate the requirements in a new national regulation. Transport Canada should facilitate and promote a national pilotage certification program for the training and evaluation of ship masters and navigational officers without compromising safety or creating a competitive pilotage situation. Where appropriate, the pilotage certification should extend to cover a class of ship in the same company. In the short term, the Laurentian Pilotage Authority should take measures to increase the number of certificate holders in the region.

#24 I recommend that Transport Canada, in consultation with the Pilotage Authorities, review the demands of a pilot job and working conditions and amend the general fitness requirements in the *General Pilotage Regulations*.

#25 I recommend that Transport Canada undertake a review of the processes for determining medical fitness of pilots and develop a best practice guideline.

#26 I recommend that in support of the implementation of the Polar Code, Transport Canada:

- Amend the *Marine Personnel Regulations* to formally recognize crew experience, training and qualifications required under the Polar Code and ensure an appropriate level of oversight; and
- Enhance and formalize training, testing and certification of an ice navigator to better reflect and ensure their core competencies.

#27 I recommend Transport Canada, the Canadian Coast Guard, and the Canadian Hydrographic Services place a priority on an accelerated timeline to develop and implement the Low Impact Corridors management structure and assess the need for pilotage services as a possible mitigating measure identified by a robust Navigation Risk Assessment Methodology.

#28 I recommend that the governance structure for pilotage services in the Canadian Arctic be assessed under a joint management structure being developed for the Low Impact Corridors.

TARIFFS AND FEES

#29 I recommend that the *Pilotage Act* grant the Pilotage Authorities complete authority to fix tariffs and other fees as is the case with NavCanada and the Port Authorities. Any tariff or fee-setting authorities should be exercised under clear directions and guidelines established in the *Pilotage Act* with proper notice and consultation with stakeholders.

#30 I recommend that when setting tariffs, the Pilotage Authorities rely on similar methodologies.

#31 I recommend that Pilotage Authorities be authorized to impose interest charges on late payments for all tariffs and fees.

#32 I recommend that the grounds for filing a tariff objection to the Canadian Transportation Agency be limited to compliance by the Pilotage Authorities with clearly specified statutory criteria (including Pilotage Authority operational considerations) and processes, and that only those subject to tariff charges, or their representatives and associations, be able to file objections.

#33 I recommend that the Canadian Transportation Agency render decisions no later than 90 days after receiving a notice of objection.

#34 I recommend that beyond tariffs for pilotage, the Pilotage Authorities be authorized to fix fees for all other products and services provided by them. I further recommend that Pilotage Authorities calculate fee levels using the same methodology and that these fees be *exempt* from the filing of objections to the Canadian Transportation Agency.

TECHNICAL AMENDMENTS

#35 I recommend that the Pilotage Authority be authorized to invest in a broader class of instruments such as Guaranteed Investment Certificates.

#36 I recommend that the *Pilotage Act* be reviewed at least every ten years, and consideration be given to a status review five years after promulgation given the large number of changes proposed. I also recommend that the *Pilotage Act* provide the Minister of Transport with the authority to engage an independent panel or individual to undertake these reviews.

#37 I recommend that a common set of Key Performance Indicators are developed to facilitate common reporting and tracking of performance across all of the Pilotage Authorities.

#38 If Recommendation 3 is not implemented, I recommend that the name of the *Administration de pilotage des Laurentides* be changed for clarity.

Appendix B:
List of Roundtable Participants

NAME	POSITION	ORGANIZATION
Anderson, Tom	Director, Marine Operations	Algoma Central Corporation
Newton, Wes	Senior Vice President	Algoma Central Corporation
Soerensen, Ken	President and Chief Executive Officer	Algoma Central Corporation
Fournier, Martin	Executive Director	Armateurs du Saint-Laurent
Murray, Debbie	Director, Policy and Regulatory Affairs	Association of Canadian Port Authorities
Zatylny, Wendy	President	Association of Canadian Port Authorities
McCabe, Larry	Board Member	Association of Municipalities of Ontario
Allen, Dan	Terminal Manager, Halifax	Atlantic Container Line
Weldon, Rick	Customer Services Manager	Atlantic Container Line
Galbraith, Anne	Chair	Atlantic Pilotage Authority
Griffiths, Sean	Chief Executive Officer	Atlantic Pilotage Authority
McFadden, Ross	Director, Operations	Atlantic Pilotage Authority
Swift, Tom	Manager, Offshore Fleet Operations	Atlantic Towing Ltd
Devries, Paul	General Manager	BC Coast Pilots
Haakonson, Roy	Vice President	BC Coast Pilots
Stewart, Robin	President	BC Coast Pilots
Pitre, Ghislain	Manager	Bear Head LNG
Barrett, Lara	Commanding Officer	Canadian Coast Guard
Gascon, Julie	Assistant Commissioner, Central and Arctic Region	Canadian Coast Guard
Nickle, Dan	Project Manager, Consolidation	Canadian Coast Guard
Toomey, David	Manager, Marine Navigation Strategies	Canadian Coast Guard
Buy, Serge	Chief Executive Officer	Canadian Ferry Association
Bidgood, Cheryl	Senior Associate, Atlantic Region	Canadian Marine Pilots' Association

Burgess, Mike	Vice President, Great Lakes Region	Canadian Marine Pilots' Association
Calder, Ross	Chair, Halifax Pilots	Canadian Marine Pilots' Association
Duffy, Don	Chair, Saint John Pilots	Canadian Marine Pilots' Association
Laflamme, Tristan	Executive Director and General Counsel	Canadian Marine Pilots' Association
Pelletier, Simon	President	Canadian Marine Pilots' Association
Pierce, Tony	Chair, Cape Breton Pilots	Canadian Marine Pilots' Association
Rae, Andrew	Vice President, Atlantic Region	Canadian Marine Pilots' Association
Stanley, Brian	Chair, Southeast Newfoundland Pilots	Canadian Marine Pilots' Association
Isaacs, Marc	National Vice President	Canadian Maritime Law Association
Boucher, Mark	President	Canadian Merchant Service Guild
van der Gracht, Mike	Captain	Canadian Merchant Service Guild
Morykot, Richard	Manager, Sydney	CBCL Limited
Burrows, Bruce	President	Chamber of Marine Commerce
Turner, Rob	Vice President, Operations	Chamber of Marine Commerce
Gee, Bonnie	Vice President	Chamber of Shipping of BC
Lewis-Manning, Robert	President	Chamber of Shipping of BC
Power, Dave	Port Manager	Charlottetown Harbour Authority Inc.
d'Aquila, Jean	Director General	Corporation des Pilotes du Bas Saint-Laurent Inc.
Robitaille, Carl	President	Corporation des Pilotes du Bas Saint-Laurent Inc.
Arsenault, Alain	President	Corporation des Pilotes du St-Laurent Central Inc.
Vaillancourt, Patrice	Director General	Corporation des Pilotes du St-Laurent Central Inc.
Nelson, Phillip	President	Council of Marine Carriers

Spalding, Donna	Director, Administration	Cruise Lines International
Wirtz, Greg	President	Cruise Lines International
Jones, Kirk	Vice President, Government and Industry Affairs	CSL Group
Prefontaine, Pierre	Senior Vice President	CSL Group
Conrad, Colin	President	FK Warren Ltd
Gagnon, Marc	Director, Government Affairs and Regulatory Compliance	FedNav
Gourdeau, Paul	Senior Vice President	FedNav Ltd
Joensen, Johan	Industry Liaison	FFAW-Unifor
Armstrong, Mike	Chair	Fraser River Pilots
Smigel, Randy	Pilot	Fraser River Pilots
Kelly, Craig	Representative	Gitga'at Nation
Hill, Matt	Councillor	Gitxaala Nation
Watkinson, Bruce	Manager, Fisheries	Gitxaala Nation
Burnett, Stephen	Executive Director	Great Lakes Cruising Coalition
Bissonnette, Stéphane	Chief Financial Officer	Great Lakes Pilotage Authority
Dion, Danièle	Chair	Great Lakes Pilotage Authority
Lemire, Robert	Chief Executive Officer	Great Lakes Pilotage Authority
Lantin, Peter	President, Council of the Haida Nation	Haida Nation
McGuire, Mike	Member, Haida Gwaii Marine Advisory Committee	Haida Nation
Young, Adeana	Councillor, Old Massett Village Council	Haida Nation
Piper, Kevin	President	Halifax Longshoremen's Local 269
Parsons, Adam	Port Marine Manager	Halifax Port Authority
Fitzgerald, Bill	Vice President, Operations	Hamilton Port Authority
Hall, Travis	Councillor	Heiltsuk Nation
Humchitt, Harvey	Hereditary Chief	Heiltsuk Nation
Moody, Reg	Executive Director, Gladstone Reconciliation Office	Heiltsuk Nation
Strong, Rick	Marine Operations Specialist, Atlantic Region	Husky Energy

Murphy, Patrick	International Vice President	International Longshoremen's Association
Hodgson, Lanna	Acting Secretary General and policy analyst	International Ship-owners Alliance of Canada
Case, Donovan	Senior Operations Representative	Irving Oil Ltd
McDames, Ken	Manager, Lands and Resources Department	Kitselas Nation
Biagi, Mark	Operations Manager, Fish and Wildlife Operations	Kitsumkalum Nation
Fontaine, Ricky	Chair	Laurentian Pilotage Authority
Fracassi, Fulvio	Chief Executive Officer	Laurentian Pilotage Authority
Tibbo, Chris	Operations Manager, North America	Maersk Supply Service Canada Ltd
Morgan, Jim	Director, Administration and Human Resources	Marine Recycling Corporation & Raw Materials Company Inc
Siddall, Jim	Director, Fleet Services	McKeil Marine
Hearn, Christopher	Director, Centre for Marine Simulation	Memorial University of Newfoundland
Wilson, Ross	Director, Stewardship	Metlakatla Nation
Farrah, Georges	Associate Secretary General for Maritime Affairs	Ministry of the Executive Council
Touhami-Rachid, Raffa	Analyst, Marine Transport	Ministry of Transport, Sustainable Mobility and Transportation Electrification
Bowles, Stan	General Manager	MOL Chemical Tankers America Ltd
Belzile, Jean-François	Harbour Master and Director of Marine Operations	Montreal Port Authority
McDonald, Brian	President and Chief Executive Officer	Montship Inc
Durdle, Paul	Chief Executive Officer	Newfoundland Transshipment Ltd
Nyce, Harry	Director, Fisheries and Wildlife, Nisga'a Lisims Government	Nisga'a Nation
Stewart, Blair	Manager, Fisheries and Wildlife	Nisga'a Nation
Pierce, Melvin	Operations Manager	Nustar Energy
Duchatelle, Lionel	Fleet Manager	Oceanex

Amat, Peter	General Manager	Pacific Basin Shipping (Canada) Ltd
Cunningham, Lorraine	Chair	Pacific Pilotage Authority
Obermeyer, Kevin	Chief Executive Officer	Pacific Pilotage Authority
Knezevic, Zoran	President and Chief Executive Officer	Port Alberni Port Authority
Carrigan, Paul	General Manager	Port of Sydney
Castonguay, René	Safety Coordinator and Port Master Assistant	Quebec Port Authority
Raby, Pascal	Vice President, Operations and Environment	Quebec Port Authority
Allen, Chad	Director, Marine Operations	Shipping Federation of Canada
Broad, Michael	President	Shipping Federation of Canada
McKinstry, Bill	Director, West Coast Operations	Shipping Federation of Canada
Mears, John	Vice Chair	Shipping Federation of Canada
Simard, Sonia	Director, Legislative and Environmental Affairs	Shipping Federation of Canada
Aubry-Morin, Jean	Vice President, External Relations	St. Lawrence Seaway Management Corporation
Heney, Tim	Chief Executive Officer	Thunder Bay Port Authority
Riehl, Mike	Vice President, Great Lakes Region	Toronto Port Authority
LeGuellec, Serge	President and General Manager	Transports Desgagnés
Xotta, Peter	Vice President, Planning and Operations	Vancouver Port Authority
Briant, John	General Manager	Western Stevedoring
Rothdram, Bruce	President and Chief Executive Officer	Wheelhouse Shipping Agency

DATES AND LOCATIONS:

November 2, 2017	St. John's, Newfoundland
November 9, 2017	Ottawa, Ontario
November 14, 2017	Montreal, Quebec
November 16, 2017	Halifax, Nova Scotia
November 23, 2017	Vancouver, British Columbia
November 30, 2017	Toronto, Ontario
December 6, 2017	Prince Rupert, British Columbia (Indigenous)
January 10, 2018	Ottawa, Ontario (Governance)
March 13, 2018	Vancouver, British Columbia
March 14, 2018	Vancouver, British Columbia (Indigenous)
March 16, 2018	Montreal, Quebec
March 20, 2018	Halifax, Nova Scotia
March 22, 2018	Toronto, Ontario

Appendix C:

List of Bilateral Sessions Participants

DATE	PARTICIPANT NAMES AND ORGANIZATIONS
24-Aug-17	Michael Broad, President, Shipping Federation of Canada
	Sonia Simard, Director, Legislative and Environmental Affairs, Shipping Federation of Canada
24-Aug-17	Bruce Burrows, President, Chamber of Marine Commerce
25-Aug-17	Simon Pelletier, President, Canadian Marine Pilots' Association
	Tristan Laflamme, Executive Director and General Counsel, Canadian Marine Pilots' Association
30-Aug-17	Fulvio Fracassi, Chief Executive Officer, Laurentian Pilotage Authority
31-Aug-17	Robert Lemire, Chief Executive Officer, Great Lakes Pilotage Authority
11-Sep-17	Sean Griffiths, Chief Executive Officer, Atlantic Pilotage Authority
11-Sep-17	Colin Conrad, President, FK Warren
	Blaise MacDonnell, General Manager and Vice President, NuStar Energy
	David Hart, Manager, Operations, NuStar Energy
12-Sep-17	Anne Galbraith, Chair, Atlantic Pilotage Authority
	Jim Stoneman, Board Member, Atlantic Pilotage Authority
	Brian Ritchie, Board Member, Atlantic Pilotage Authority
	Alissa Aymar, Board Member, Atlantic Pilotage Authority
	Patricia Mella, Board Member, Atlantic Pilotage Authority
	Ted Anthony, Board Member, Atlantic Pilotage Authority
12-Sep-17	Simon Pelletier, President, Canadian Marine Pilots' Association
	Andrew Rae, Vice President, Atlantic Region, Canadian Marine Pilots' Association
	Cheryl Bidgood, Senior Associate, Atlantic Region, Canadian Marine Pilots' Association
15-Sep-17	Mark Boucher, President, Canadian Merchant Service Guild
15-Sep-17	Scott Streiner, Chair and Chief Executive Officer, Canadian Transportation Agency
	Elizabeth Barker, General Counsel and Secretary, Canadian Transportation Agency
15-Sep-17	Jean Laporte, Chief Operating Officer, Transportation Safety Board

20-Sep-17	Robert Lewis-Manning, President, Chamber of Shipping of British Columbia
	Bonnie Gee, Vice President, Chamber of Shipping of British Columbia
20-Sep-17	Jeff Hutchinson, Commissioner, Canadian Coast Guard
	Mario Pelletier, Deputy Commissioner, Operations, Canadian Coast Guard
21-Sept-17	Tristan Laflamme, Executive Director and General Counsel, Canadian Marine Pilots' Association
	Mike Burgess, Vice President, Great Lakes Region, Canadian Marine Pilots' Association
21-Sep-17	Robert Lemire, Chief Executive Officer, Great Lakes Pilotage Authority
	Stéphane Bissonnette, Chief Financial Officer, Great Lakes Pilotage Authority
	Danièle Dion, Acting Chair and Vice Chair, Great Lakes Pilotage Authority
	Michael Pratt, Board Member, Great Lakes Pilotage Authority
	James Pound, Board Member, Great Lakes Pilotage Authority
	Michel Desrochers, Board Member, Great Lakes Pilotage Authority
	Terry Geddes, Board Member, Great Lakes Pilotage Authority
27-Sep-17	Terry Bowles, Chief Executive Officer, St. Lawrence Seaway Management Corporation
	Jean Aubry-Morin, Vice-President, External Relations, St. Lawrence Seaway Management Corporation
	Bruce Hodgson, Director, Market Development, St. Lawrence Seaway Management Corporation
02-Oct-17	Michael Broad, President, Shipping Federation of Canada
	Chad Allen, Director, Operations, Shipping Federation of Canada
	Sonia Simard, Director, Legislative and Environmental Affairs, Shipping Federation of Canada
	Paul Kennedy, President, Robert Reford
	Wolfgang Schloch, Vice President, Hapag-Lloyd (Canada) Inc.
	Paul Gourdeau, Executive Vice President, FedNav Ltd
	Volger Kluge, President, ZIM
	Brian Keegan, Operations Manager, Orient Overseas Container Line
	Robert van den Ende, President and Board Member, Gresco
02-Oct-17	Fulvio Fracassi, Chief Executive Officer, Laurentian Pilotage Authority
	Mario St-Pierre, Counsel, Laurentian Pilotage Authority
03-Oct-17	Bruce Burrows, President, Chamber of Marine Commerce
	Rob Turner, Vice President, Operations, Chamber of Marine Commerce
04-Oct-17	Kevin Obermeyer, Chief Executive Officer, Pacific Pilotage Authority

05-Oct-17	Simon Pelletier, President, Canadian Marine Pilots' Association
	Tristan Laflamme, Executive Director and General Counsel, Canadian Marine Pilots' Association
	Captain Robin Stewart, President, British Columbia Coast Pilots
	Captain Roy Haakonson, Vice President, British Columbia Coast Pilots
	Paul Devries, General Manager, British Columbia Coast Pilots
05-Oct-17	Lorraine Cunningham, Chair, Pacific Pilotage Authority
	Mike Roman, Board Member, Pacific Pilotage Authority
	Al Ranger, Board Member, Pacific Pilotage Authority
	Katherine Bright, Board Member, Pacific Pilotage Authority
	Karen Horcher, Board Member, Pacific Pilotage Authority
	Paul Prefontaine, Board Member, Pacific Pilotage Authority
	Peter Bernard, Board Member, Pacific Pilotage Authority
05-Oct-17	Robert Lewis-Manning, President, Chamber of Shipping of British Columbia
	Bonnie Gee, Vice President, Chamber of Shipping of British Columbia
05-Oct-17	Greg Wirtz, President, Cruise Lines International
	Donna Spalding, Director, Administration, Cruise Lines International
05-Oct-17	Simon Pelletier, President, Canadian Marine Pilots' Association
	Tristan Laflamme, Executive Director and General Counsel, Canadian Marine Pilots' Association
06-Oct-17	John Mears, Vice Chair, Shipping Federation of Canada
	Bill McKinstry, Director, West Coast Operations, Shipping Federation of Canada
	Scott Galloway, Director, Strategic Initiatives, Shipping Federation of Canada
	Ben Puehse, Manager, Operations, Hapag-Lloyd (Canada) Inc.
	Tim McGee, Manager, Operations, OOCL (Canada) Inc.
	Rob Sears, Manager, Sales, Montship
	Famida Thobani, General Manager, Zim Integrated Shipping Services (Canada) Co. Ltd
06-Oct-17	Peter Xotta, Vice President, Planning and Operations, Vancouver Port Authority
	Chris Wellstood, Director, Marine Operations, Vancouver Port Authority
06-Oct-17	Robin Stewart, President, British Columbia Coast Pilots
	Roy Haakonson, Vice President, British Columbia Coast Pilots

12-Oct-17	Carl Robitaille, President, Corporation des Pilotes du Bas Saint-Laurent
	Jean d'Aquila, Director General, Corporation des Pilotes du Bas Saint-Laurent
	Alain Arsenault, President, Corporation des Pilotes du St-Laurent Central
	Pierre Vaillancourt, Director General, Corporation des Pilotes du St-Laurent Central
	Simon Pelletier, President, Canadian Marine Pilots' Association
	Tristan Laflamme, Executive Director and General Counsel, Canadian Marine Pilots' Association
12-Oct-17	Carl Robitaille, President, Corporation des Pilotes du Bas Saint-Laurent
	Jean d'Aquila, Director General, Corporation des Pilotes du Bas Saint-Laurent
	Simon Pelletier, President, Canadian Marine Pilots' Association
	Tristan Laflamme, Executive Director and General Counsel, Canadian Marine Pilots' Association
13-Oct-17	Alain Arsenault, President, Corporation des Pilotes du St-Laurent Central
	Pierre Vaillancourt, Director General, Corporation des Pilotes du St-Laurent Central
13-Oct-17	Martin Fournier, Executive Director, Armateurs du Saint-Laurent
15-Oct-17	Sylvie Vachon, Chief Executive Officer, Montreal Port Authority
	Daniel Dagenais, Vice President, Operations, Montreal Port Authority
15-Oct-17	Fulvio Fracassi, Chief Executive Officer, Laurentian Pilotage Authority
16-Oct-17	Bruce Burrows, President, Chamber of Marine Commerce
	Louis-Marie Beaulieu, Board Member, Chamber of Marine Commerce
	Tony Boemi, Board Member, Chamber of Marine Commerce
	Terence Bowles, Board Member, Chamber of Marine Commerce
	Allister Paterson, Board Member, Chamber of Marine Commerce
	Wayne Smith, Board Member, Chamber of Marine Commerce
	Chuck Hriczak, Board Member, Chamber of Marine Commerce
	Ward Weisenel, Board Member, Chamber of Marine Commerce
25-Oct-17	Simon Pelletier, President, Canadian Marine Pilots' Association
	with Canadian Marine Pilots' Association Executive
27-Oct-17	Paul Gourdeau, Senior Vice President, FedNav Ltd
	Marc Gagnon, Director, Government Affairs and Regulatory Compliance, FedNav Ltd
	Serge LeGuellec, President and General Manager, Groupe Desgagnés
	René Grenier, Consultant
	Jean-Luc Bédard, Consultant

27-Oct-17	Fulvio Fracassi, Chief Executive Officer, Laurentian Pilotage Authority
	Mario St-Pierre, Management, Laurentian Pilotage Authority
	Sylvain Lachance, Management, Laurentian Pilotage Authority
	Claude Lambert, Management, Laurentian Pilotage Authority
	Jacques Vigneault, Board Member, Laurentian Pilotage Authority
	Louis Rhéaume, Board Member, Laurentian Pilotage Authority
	Frank Di Tomaso, Board Member, Laurentian Pilotage Authority
	Michel Tosini, Board Member, Laurentian Pilotage Authority
	Gilles Morin, Board Member, Laurentian Pilotage Authority
30-Oct-17	Wendy Zatylny, President, Association of Canadian Port Authorities
	Debbie Murray, Director, Policy and Regulatory Affairs, Association of Canadian Port Authorities
3-Nov-17	Cheryl Bidgood, Senior Associate, Atlantic, Canadian Marine Pilots' Association
	Tristan Laflamme, Executive Director and General Counsel, Canadian Marine Pilots' Association
	Brian Stanley, Chair, Southeast Newfoundland Pilots, Canadian Marine Pilots' Association
10-Nov-17	Serge Buy, Chief Executive Officer, Canadian Ferry Association
	Kristin Baldwin, Director, Communications, Canadian Ferry Association
17-Nov-17	Andrew Rae, Vice President, Atlantic Region, Canadian Marine Pilots' Association
	Cheryl Bidgood, Senior Associate, Atlantic Region, Canadian Marine Pilots' Association
17-Nov-17	Greg Aitkins, Senior Partner, Intellection Consulting
20-Nov-17	Martin Fournier, Executive Director, Armateurs du Saint-Laurent
	Myriam Beauchamp, Project Manager, Environment and Communications
	Jean-Philippe Brunet, Executive Vice President, Corporate and Legal Affairs, Ocean Group Inc
	Marc Gagnon, Director, Government Affairs and Regulatory Compliance, Fednav Ltd
	Gilles Legault, Senior Counsel, Global Legal Affairs, Canadian National Railway Corporation
	Suzanne Paquin, President and Chief Executive Officer, Nunavik Eastern Arctic Shipping
	Pierre Préfontaine, Senior Vice President Canada Steamship Lines
	Matthew Kendrick, Commercial Manager, McKeil Marine Ltd
	François Bertrand, Chief Executive Officer, Société des traversiers du Québec

22-Nov-17	Robert Lewis-Manning, President, Chamber of Shipping of British Columbia
	Bonnie Gee, Vice President, Chamber of Shipping of British Columbia
	Greg Wirtz, President, Cruise Lines International Association
	Donna Spalding, Director, Administration, Cruise Lines International Association
	Lanna Hodgson, (Acting) Secretary General, International Ship-owners Alliance of Canada
	Stan Bowles, General Manager, MOL Chemical Tankers America Inc.
	Bruce Rothdram, President and Chief Executive Officer, Wheelhouse Shipping Agency Ltd
	Clifford Faleiro, Manager, Operations, North America West Coast, Saga Welco AS
	Russell D'Souza, Port Captain, Oldendorff Carriers
	Anthony Damron, Manager, Operation, G2 Ocean
	Lucky Hewavitharana, G2 Ocean
	Simon Brown, Manager, Operations, Pacific Basin Shipping
	Richard Chappell, Regional Vice President, Operations, Canada, Westwood Shipping Lines
	Garth Mitcham, Director, West Coast, CSL International
22-Nov-17	Kevin Obermeyer, Chief Executive Officer, Pacific Pilotage Authority
	Stefan Woloszyn, Chief Financial Officer, Pacific Pilotage Authority
	Robin Stewart, President, British Columbia Coast Pilots
	Paul Devries, General Manager, British Columbia Coast Pilots
22-Nov-17	John Mears, Vice Chair, Shipping Federation of Canada
22-Nov-17	Phillip Nelson, President, Council of Marine Carriers
29-Nov-17	Ken Soerensen, President, Algoma Central Corporation
	Wes Newton, Senior Vice President, Corporate Development and General Counsel, Algoma Central Corporation
	Tom Anderson, Director, Ports and Harbours, Tom Anderson, Director, Ports and Harbours
	Danielle Lewis, Manager, Raw Materials, ArcelorMittal Dofasco G.P.
29-Nov-17	Tristan Laflamme, Executive Director and General Counsel, Canadian Marine Pilots' Association
	Mike Burgess, Vice President, Great Lakes Region, Canadian Marine Pilots' Association

05-Dec-17	Joe Rektor, Interim Chief Executive Officer, Prince Rupert Port Authority
	Shaun Stevenson, Vice President, Trade and Development, Prince Rupert Port Authority
	Dave Charlton, Director, Port Operations, Prince Rupert Port Authority
	Ken Veldman, Director, Public Affairs, Prince Rupert Port Authority
14-Dec-17	Joseph Galimberti, President, Canadian Steel Producers Association
	Sean Young-Steinberg, Director, Trade and Economics, Canadian Steel Producers Association
05-Jan-18	Michael Broad, President, Shipping Federation of Canada
	Sonia Simard, Director, Legislative and Environmental Affairs, Shipping Federation of Canada
	Chad Allen, Director, Marine Operations, Shipping Federation of Canada
	Errol Francis, Executive Vice President, Canfornav Ltd.
	Marco Renzelli, Managing Director, Wagenborg (North America) Ltd.
	John Sveistrup, Director, Spliethoff Shipping Canada
09-Jan-18	Carl Robitaille, President, Corporation des Pilotes du Bas Saint-Laurent
	Jean d'Aquila, Director General, Corporation des Pilotes du Bas Saint-Laurent
09-Jan-18	Alain Arsenault, President, Corporation des Pilotes du St-Laurent Central
	Pierre Vaillancourt, Director General, Corporation des Pilotes du St-Laurent Central
11-Jan-18	Kevin Obermeyer, Chief Executive Officer, Pacific Pilotage Authority
	Stefan Woloszyn, Chief Financial Officer, Pacific Pilotage Authority
11-Jan-18	Robin Stewart, President, British Columbia Coast Pilots
	Roy Haakonson, Vice President, British Columbia Coast Pilots
	Paul Devries, General Manager, British Columbia Coast Pilots

Appendix D:

List of Written Stakeholder Submissions

STAKEHOLDER	SUBMISSION TITLE	DATE
Armateurs du Saint-Laurent	Examen de la *loi sur le pilotage*	01-Nov-17
Atlantic Pilotage Authority	Views of the Atlantic Pilotage Authority on: *Pilotage Act* Review	30-Oct-17
British Columbia Coast Pilots Ltd.	The British Columbia Coast Pilots Ltd. Submission	30-Oct-17
Canadian Ferry Association	Position Paper: *Pilotage Act* Review	01-Nov-17
Canadian Marine Pilots' Association	Canadian Pilotage: Delivering Outstanding Value for All Canadians	Oct-17
Canadian Marine Pilots' Association – Atlantic Region	Atlantic Region Submission – *Pilotage Act* Review	15-Nov-17
Canadian Merchant Service Guild	The Canadian Merchant Service Guild Submission	30-Oct-17
Canadian Steel Producers Association	Canadian Steel Producers Association Submission	14-Dec-17
Chamber of Marine Commerce	*Pilotage Act* Review - Areas for Reform - Preliminary Submission	31-Oct-17
Chamber of Shipping of British Columbia	Preliminary Submission to the *Pilotage Act* Review	01-Nov-17
Corporation des Pilotes du bas du Saint-Laurent	Mémoire - Examen de la *loi sur le pilotage*	10-Nov-17
Corporation des Pilotes du St-Laurent Central	Preliminary Report - *Pilotage Act* Review	Nov-17
Council of Marine Carriers	Council of Marine Carriers Submission	31-Oct-17
Cruise Lines International Association – North West & Canada	Cruise Lines International Association – North West & Canada Submission	01-Dec-17
Fertilizer Canada	*Pilotage Act* Review Submission by Fertilizer Canada	Oct-17
Fraser River Pilots	Fraser River Pilots Position on the Review of the *Pilotage Act*	31-Oct-17

Great Lakes Pilotage Authority	Great Lakes Pilotage Authority Submission	27-Oct-17
Groupe Desgagnés Inc. and Fednav Limited	Summary - Preliminary recommendations to modernize the regulatory framework of the *Pilotage Act*, the delivery of services, governance structure, trends and technological advances	Dec-17
Heiltsuk First Nation	Heiltsuk First Nation Submission	14-Mar-18
International Longshoremen's Association	International Longshoremen's Association Submission	22-Nov-17
Irving Oil Limited	Irving Oil Submission	12-Jan-18
Laurentian Pilotage Authority	Review of the *Pilotage Act*	Oct-17
Marine Recycling Corporation	Marine Recycling Corporation Response – Key Questions	30-Nov-17
Mariner Seafoods	Mariner Seafoods Submission	30-Nov-17
Pacific Pilotage Authority	Final Submission from the Pacific Pilotage Authority	04-Dec-17
Shipping Federation of Canada	Preliminary Comments by the Shipping Federation of Canada	30-Oct-17
Vancouver Fraser Port Authority	Vancouver Fraser Port Authority Submission Regarding Review of the *Pilotage Act*	01-Dec-17
Western Grain Elevator Association	Western Grain Elevator Association Submission	15-Mar-18